THE

COMPLEAT FAMILY PHYSICIAN;

OR,

UNIVERSAL MEDICAL REPOSITORY.

CONTAINING THE

CAUSES, SYMPTOMS, PREVENTIONS, AND CURES,

OF

ALL THE VARIOUS MALADIES TO WHICH HUMAN NATURE IS LIABLE.

WITH

AN ACCOUNT OF EVERY CELEBRATED SPA, BRITISH AND FOREIGN;

AND

STRICTURES ON QUACKERY.

TO WHICH ARE ADDED,

THE FAMILY SURGERY;

THE COMPLEAT BRITISH HERBAL;

OBSERVATIONS ON TEA, COFFEE, TOBACCO, AND SNUFF;

AND

A GREAT VARIETY OF MOST EXTRAORDINARY CASES IN PHYSIC AND SURGERY.

THE WHOLE FORMING

A COMPLEAT BODY OF DOMESTIC MEDICINE,

CALCULATED

AS WELL TO ASSIST GENTLEMEN OF THE FACULTY, AS FOR THE USE OF PRIVATE FAMILIES.

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By HUGH SMYTHSON, M.D.

LONDON:
Printed for HARRISON and Co. Nº 18, Paternoſter Row.
MDCCLXXXV.

TO THE
MANY NOBLE, HUMANE, AND BENEVOLENT CHARACTERS,
BY WHOSE
MUNIFICENCE AND GENEROSITY
THE VARIOUS
HOSPITALS, INFIRMARIES, DISPENSARIES,
AND OTHER
CHARITABLE INSTITUTIONS,
WHICH
MARK WITH SUCH DISTINGUISHED LUSTRE
THE
HUMANITY OF THE BRITISH NATION,
ARE
SUPPORTED AND MAINTAINED,

THIS WORK,

CALCULATED TO PROMOTE AND EXTEND THEIR BENIGN INTENTION,
THE ALLEVIATION OF HUMAN MISERY,
IS,
WITH THE HIGHEST ESTEEM, REGARD, AND VENERATION,
MOST RESPECTFULLY INSCRIBED,
BY THEIR DEVOTED
AND OBEDIENT SERVANT,

Hugh Smythſon.

endeavoured to ſteer a middle courſe between the tardy and over-cautious proceſs of what is called the regular practice, and the violent and too often dangerous operations of empirical pretenders.

An *Herbal* is added to this work, *from the beſt Engliſh botanic writers*; an addition extremely intereſting, as it is abſolutely neceſſary that the reader ſhould be completely informed of the different names, virtues and effects of the ſeveral plants which are included in his Syſtem of Medicine; and as it may prove highly entertaining to thoſe who are prevented by more urgent engagements from profiting by the voluminous and numerous publications of this pleaſing and popular ſubject.

The Author is aware, that when he earneſtly recommends this work to the attention of every individual, he ſhall be told (for ſuch are the common, it may perhaps be ſaid the vulgar prejudices) *that medical knowledge is not deſigned for practitioners*, is a *dangerous acquiſition*, *that it is apt to inſpire them with fears, apprehenſions, and fancied inſufficiency; and that as few are diſpoſed to drink deep of this cup of ſcience, they will be ready to form ſuperficial opinions, and try experiments upon themſelves, from haſty and ill-grounded judgments.* To ſubdue prejudices of ſo fatal a tendency, is one of the inducements to this publication; and if after it has been attentively and candidly peruſed, a trace of them remains, the Author will then acknowledge himſelf to have laboured in vain for the univerſal benefit of mankind.

To diſpel the clouds that have too long overſhadowed this divine art; to render the practice of phyſic as obvious and eaſy, as it is uſeful and neceſſary; to communicate bleſſings, the concealment of which is little leſs than criminal; to direct the affluent and the indigent, the learned and the illiterate, in the road to health; to conduct them through the journey of life with as little pain, and as much ſatisfaction, as the complex mechaniſm of the human fabric, ever ſubject to diſorder and infirmity, will permit; and to remind mankind of their high obligations to the great Author of their exiſtence, who in his judgments for their tranſgreſſions has remembered mercy, and condeſcended to afford balm to pour into their wounds; have been the principal objects of the Author in the following ſheets; which he ſubmits to the public, in full confidence of the rectitude of his intentions, and with the moral certainty, that with a reaſonable degree of attention, they muſt be extremely beneficial, and can by no poſſible means prove injurious to a ſingle individual.

The Author looks forward with the higheſt pleaſure to the happy effects of this publication, through the many humane and benevolent characters among the *country gentlemen* and *reſident clergy*, in the different, and more eſpecially

INTRODUCTION.

LITTLE apology is neceſſary for introducing to the world a work calculated to promote the happineſs of mankind; and the *preſervation* and *reſtoration* of HEALTH, the firſt grand article in the enumeration of earthly bleſſings, are ſubjects of a nature ſo very agreeable and intereſting, that few arguments will be required, to perſuade the world to receive with regard, and treat with attention, every attempt to facilitate objects of ſuch univerſal importance.

The tender ſtructure of the human frame, ſo *fearfully and wonderfully made*, the nice and delicate organs of ſenſe, the force and effects of the paſſions and deſires, and the great variety of dangers and maladies *which fleſh is heir to*, are ſuch powerful incentives to the exertion of every faculty of ſelf-defence; that he who offers to the public improvements in the arts of healing, or promulgates in familiar language, and on eaſy terms, thoſe already known, he who will venture to ſtrip the ſcience of phyſic of abſtruſe and technical expreſſion, and place it within the reach of ordinary men, will not be deceived in his expectations of the thanks and applauſe he deſerves.

Of the many thouſand volumes which have been publiſhed on a ſubject of ſo much conſequence, very few have even pretended to contain a *regular* and *compleat ſyſtem:* different authors have treated of different diſorders; the phyſical library has been ſwelled to an enormous bulk; the works of phyſicians have been loaded with the hypotheſes of the ancients, or conjectural ideas of their own, conveyed in languages of which the far greater part of mankind are ignorant, and enveloped in the dark clouds of profeſſional myſtery.

In the remoter provinces of the kingdom of Great Britain, (and, indeed, in every part of it, except the metropolis and it's environs) medical aſſiſtance is placed at ſuch a diſtance from the major part of the inhabitants, and the expence of obtaining it is ſo conſiderable, that the patient's caſe frequently becomes deſperate before it can be procured, or his circumſtances preclude him from ſeeking it at all.

Thus equally incapable of having recourſe to the theory of phyſic, by peruſing the voluminous productions of ſo many hundred authors, and of acquiring help in the hour of ſickneſs, from the diſtance of medical practitioners, great numbers of individuals are left to the operations of diſeaſe, or the ſtruggles of nature, unaſſiſted by the numerous and providential diſcoveries of art, unleſs where a county hoſpital here and there preſents it's aid, and the benevolent hand of ſome compaſſionate landlord, by mere accident reſiding on the ſpot, enables the unhappy victim to avail himſelf of the charitable inſtitution.

To remove obſtructions in the acquirement of ſuch a degree of medical knowledge, as may enable the diſeaſed to have immediate recourſe to proper remedies, without the delays occaſioned by ſending many miles for a phyſician or apothecary, and without incurring an expence which in many caſes they are ill able to bear; to bring men of common capacities ſo well acquainted with the *ſymptoms*, *nature*, and *origin* of their diſorders, that they may not be in danger of uſing improper medicines and unſafe methods of cure; and to direct them to the adminiſtration of ſimple, eaſy, and cheap ones; is attempted in the following work: and if long experience and attentive ſtudy, if practiſing on liberal principles, and repeated and candid trials of the doctrines, opinions, and preſcriptions, of the moſt eminent writers, can entitle the Author to credit and confidence, he flatters himſelf the COMPLEAT FAMILY PHYSICIAN will make it's way in the world with ſuch a degree of reputation, as to repay his toils and labours with the higheſt gratification he is capable of receiving.

Nor will the Author confine himſelf to the preſcriptions of the college. *Quacks* and *empirics* appear in many inſtances to have acquired well-deſerved reputations; noſtrums have of late years made their appearances, which their determined votaries have reported to be infallible. Some of them have undoubtedly been adminiſtered with aſtoniſhing ſucceſs; and, in many inſtances, have put to flight diſeaſes which had baffled every ſpecies of regular attack. Of theſe medicines, their operations and effects, the beſt accounts that can be procured will be given in the courſe of this work, without prejudice or partiality: for though it may be neceſſary to be on our guard againſt the vaſt variety of ſpecificks, which are daily offered to our uſe, in the pompous advertiſements of the public prints, rivalling in numbers the catalogue of medicines in the apothecaries ſhops of the laſt century; yet it would be a ſtrange kind of infidelity, to diſallow the well-authenticated cures attributed to *Dr. James's Fever Powders*, *Dr. Ward's Pill and Drop*, *the Ormſkirk Powders for Canine Madneſs*, and ſeveral other medicines of the ſame claſs; the ſalutary effects of which have in many inſtances been eſtabliſhed, on the teſtimonies of the firſt characters of the preſent age.

The properties and effects of the ſeveral *Medicinal Springs* and *Baths* throughout this kingdom, as well as thoſe of other countries, whoſe waters are uſually imported into Great Britain, though almoſt wholly devoted to the relief of the affluent, will be attentively and copiouſly diſcuſſed. The author of this work means not to confine it's uſefulneſs to any order or condition of men; he truſts all ranks, from the higheſt to the loweſt, will find in it ſuch plain and comprehenſive directions, as may prove equally ſalutary to the nobleman in his palace, and the peaſant in his cottage: nor does he apprehend he ſhall incur the imputation of vanity, when he expreſſes ſuch a hope, becauſe he wiſhes it may be fully underſtood, that he has relied much leſs on his own practice and experience, than on the authorities of thoſe great and reſpectable phyſicians, from whoſe works (though the author has thought it unneceſſary to inſert their names) many of the moſt valuable preſcriptions, both as to *regimen* and *medicine*, have been faithfully and carefully extracted.

In the annexed *Liſts of Medicines*, and *Medicinal Preparations*, no others will be found than ſuch as are referred to or preſcribed under the various heads of diſeaſes: the exerciſe of reaſon, and the application of experience, have in this enlightened age reduced the *materials of phyſic* to a very narrow compaſs; and it is ſomewhat remarkable, that the principal ingredients in the modern compoſition of medicine, ſuch as *mercury* and *antimony*, in their various forms, were rejected by the ancients, under an idea of their being deſtructive of that health, of which they are now found to be the ſovereign preſervers and reſtorers.

The Author has added to his Liſts of Medicines the *prices* at APOTHECARIES HALL, becauſe it is well known, that in the regulation of that approved diſpenſatory, the viſitation and inſpection of the beſt phyſicians in the world, baniſh every apprehenſion of ſophiſtication or adulteration, and that from the liberality and public ſpirit with which that admirable plan is conducted, every article is vended at the loweſt rate, conſiſtent with a due attention to unrivalled excellence.

Of the diſtillation of *ſimple waters*, and the compoſition of ſuch family medicines as claim no acquaintance with the apothecary's ſhop, little need be ſaid; almoſt every houſe produces ſome notable female, who, with due regard to the plain directions contained in this work, will execute her office with ſatiſfaction to herſelf and advantage to the convaleſcent.

Where the Author has recommended *alteratives* in the form of *diet drinks*, *decoctions*, or other preparations of the like kind, preſcriptions are ſubjoined; and proper care is taken that no information may be wanting, either as to the frequency or quantity in which they are to be adminiſtered.

If the Author ſhould appear to have devoted more particular attention to *regimen*, than is uſual in Medical Treatiſes, he begs leave to account for it by obſerving, that it has ever been his opinion, and it has been confirmed by his practical experience, that a ſkilful and well-informed *nurſe* is as eſſential to the re-eſtabliſhment of health, as a learned and diſintereſted *phyſician*; but as the former generally acts with much leſs authority than the latter, he has endeavoured to perſuade the patient to become his own nurſe, to regulate his own conduct in the ſeveral concomitant articles of air, exerciſe, and diet, and to convince him, that without a ſtrict conformity to rules in theſe particulars, the efforts of medicine will be in vain, and the beſt deviſed means of art be counteracted by intemperance, irregularity, or exceſs.

Few caſes in *Surgery* fall within the reach of theory; the judgment of the anatomiſt, and the hand of the ſkilful operator, are required in moſt exterior accidents which affect the human frame; yet where from the ſlightneſs of the occaſion, profeſſional aſſiſtance may poſſibly be diſpenſed with, or where the exigency of the circumſtance calls for inſtant help, ſuch general ideas are thrown out, and ſuch ſimple and ready applications ſuggeſted, as may in many inſtances prove of themſelves effectual, and in others ſupply the want of immediate chirurgical attendance.

Nor will the Author, he preſumes, be cenſured for deſcending too low, when he enumerates and provides cures for thoſe *leſſer evils*, which, though they are uſually committed to the care of practitioners much inferior to the regular profeſſors of phyſic, are yet of conſequence enough to deſtroy the comfort and obſtruct the happineſs of the ſufferer; and not unfrequently, by long continuance, and total diſregard, induce a habit of ſicklineſs, and imperceptibly ſap and undermine the beſt conſtitution. For ſuch complaints familiar remedies are pointed out, and little rules laid down; attending to which, thoſe petty invaders of eaſe, elegance, and health, may be effectually prevented or diſmiſſed.

Particular diſorders, and thoſe incident to criterion of time or ſex, ſubjects indiſpenſibly introduced in ſo general a work, the author has treated of with the greateſt degree of delicacy, which a due regard to the ſafety of thoſe for whom he writes would poſſibly admit; yet he entertains the moſt ſanguine hope, that this part of his work will prove eſſentially ſerviceable, as he has endeavoured to ſteer a middle courſe between the tardy and over-cautious proceſs of what is called the regular practice, and the violent and too often dangerous operations of empirical pretenders.

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The Author looks forward with the higheſt pleaſure, to the happy effects of this publication, through the many humane and benevolent characters among the *country gentlemen* and *reſident clergy*, in the different, and more eſpecially in the remote provinces of theſe kingdoms; in ſuch hands, this little medical library will prove an invaluable treaſure: ſtrongly inclined to adminiſter to every ſpecies of diſtreſs, how will the commiſerating heart rejoice at the ready means of offering, not only relief from the horrors of want, but from the pangs of diſeaſe! and how delightful the reflection of having reſtored to an affectionate huſband the wife of his boſom, to the numerous family a tender mother, to the aged parent a dutiful child, and to the community a worthy and valuable member!

Nor will the *ſofter ſex* be excluded from a participation in theſe heart-felt ſcenes of pleaſure: in a plain and familiar dreſs, medicine now courts their attention; the ſacred cabinet of phyſical knowledge is at length opened, and the barbarous policy of confining it's exerciſe within the pale of dead and learned languages is now at an end. Nor does the Author mean to flatter, or to riſque an improbable conjecture, when he expreſſes his expectations, that his fair countrywomen may ſhortly attain to the ſame excellence in the healing arts, which they already exhibit in the various ſciences which have been hitherto the ſubjects of their ſtudy; and that, to the bleſſings already derived from theſe *laſt, beſt works of God*, we may add the preſervation and reſtoration of health.

To render this work univerſal and extenſive, not a ſingle *term of art* has been retained for which a ſuitable expreſſion could be found in the Engliſh language; in the few inſtances where that difficulty has occurred, an immediate explanation is given; and to avoid the poſſibility of error and miſtake, the *quantities* are expreſſed in words at length; the Author has himſelf corrected the preſs, and every caution has been exerciſed to prevent any ſpecies of miſapplication.

The life of man is marked in diſtinct periods, and the diſeaſes moſt commonly incident to each period are treated of under that particular head; for this purpoſe, and for the eaſe and convenience of the reader, the whole is divided into books, and thoſe ſubdivided into chapters, and the contents prefixed to each particular book and chapter, ſo that the patient or his friend may without difficulty or confuſion turn at once to the diſorder, treatment, and cure.

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THE

THE

Compleat Family Phyſician;

OR,

UNIVERSAL MEDICAL REPOSITORY.

BOOK I.

Of the Diſeaſes of Infants, Youth, and Unadults, and in particular of epidemic eruptive Diſeaſes, ſuch as Small-Pox, Meaſles, Chicken-Pox, Swines-Pox, &c. and of Inoculation.

CHAP. I.

Of the Management and Treatment of Infants from the Birth.

PERHAPS it is the wiſdom of the Divine diſpenſation, that the human offspring ſhould enter the world in a more helpleſs condition than any other animal. The brute creation, under the guidance of inſtinct, a kind of ſubſtitute for reaſon, either abandon their young in the inſtant of their exiſtence, or foſter them with unremitting care and unerring management; but, expoſed to the open air, and the inclemencies of the ſeaſons, bountiful nature has provided them with neceſſary coverings and ſuitable food, and they are in much leſs danger from the attacks of diſeaſe, than the depredations of voracious invaders: as their wants are few, tenderneſs and attention are required to be but of ſhort duration; they ſpeedily ripen into maturity, are enabled to ſupply their own neceſſities, and the ties of parental and filial affection are quickly diſſolved, leaving no trace behind of the once intimate connection.

But to man, the image of God, endowed with the faculty of reaſon, and accountable for it's exerciſe, more important cares are allotted: conceived in ſin, and brought forth in ſorrow, the little ſtranger no ſooner makes his appearance in this world of woe, than he is ſurrounded with dangers, and threatened with diſeaſe; maladies of a thouſand kinds preſent themſelves to awaken parental tenderneſs, and excite thoſe warm affections, which are deſtined to continue, both as a natural impulſe and duty, to the end of our lives.

The bills of mortality furniſh us with melancholy proofs of the great care and attention neceſſary in the preſervation of infants. In the metropolis, where air, exerciſe, and cleanlineſs, are in general wanting; where the father and mother (both probably employed in procuring the means of exiſtence) are often confined, with a numerous family, in the narrow compaſs of a garret, or the loathſome limits of a cellar; it is not ſurpriſing that ſo large a proportion of their offspring ſhould be conſigned to an early and untimely grave. In the country, indeed, this evil, of ſuch moral and political danger, is leſs predominant: where the parents are devoted to the labours of huſbandry only, the children are in general healthy; but in manufacturing towns and villages, they partake for the moſt part of the ſame fate which attends the inhabitants of the metropolis.

Nor is the want of care more deſtructive to the human ſpecies in the infant ſtate, than an immoderate and exceſſive exerciſe of it; ignorant nurſes, and other aſſiſtants, too frequently and officiouſly introduce ſuch a vaſt number of articles wholly unneceſſary, and often injurious, in the food, cloaths, and medicines of infants, that the loſs of great numbers may be attributed to this ill-applied and over-buſy zeal.

Another principal cauſe of the deſtruction of infants, is the want of that congenial nutrition, which nature has provided for their ſuſtenance, and the ſubſtitution of foreign aliment, often unwholeſome, and always unnatural.

It will not be denied that the infant partakes of the conſtitution of it's parents, and that as the mother has the largeſt ſhare in it's formation, ſo it will be moſt apt to reſemble her in habit of body; this being admitted, what can equal the abſurdity of robbing it of the food, which muſt, of all others, be moſt adapted to it's ſupport, and ſupplying it with the milk, habits, and diſorders of a ſtranger! or what wretched influence can prevail on a mother to abandon the care of her child to [illegible] and [illegible] de[illegible] it so probable [illegible]; depriving herſelf of one of the moſt delightful offices that fall within her ſphere, and idly bartering for unſubſtantial amuſements, the ſolid ſatisfaction of cheriſhing, protecting, and forming, the bodies and minds of a healthy, beautiful, and grateful offspring!

Nor is the evil confined to the child thus torn from it's mother's breaſt: the infant who claims the ſuſtenance, thus ſold to the nurſling, preſents us another ſufferer, robbed of nouriſhment and attendance, and generally attempted to be brought up by hand; it pines for a few months, and then dies in a ſtate of emaciation, occaſioned by actual want; or if it ſhould have ſtrength and conſtitution enough to ſtruggle through it's infancy, attains the years without the conditions of manhood, and creeps through life, feeble, ſickly, and unhappy. And thus, too often, from vanity and levity on the one hand, and a mercenary ſpirit on the other, is the community deprived of two uſeful members at once, or a miſerable exchange made of beauty and health, for deformity and decrepitude.

It is, however, by no means juſt to ſuggeſt, that every mother is capable of ſuckling her own child; or that all mothers are alike capacitated for this neceſſary taſk; many caſes offer in which it is impracticable, and others in which it would be imprudent, and equally dangerous to the mother and infant. Women who, from delicate habits or conſtitutions, are ſubject to nervous or hyſteric complaints, are certainly unqualified to obey the calls of nature in the performance of a duty ſo tender, agreeable, and eſſential.

But the mere act of giving ſuck is by no means to be conſidered as the only buſineſs of the mother; a variety of other circumſtances demand her attention, and the future health, happineſs, and comfort of her child, depend on her care and management in this early period of it's exiſtence.

Nor is the father to be excuſed from his ſhare in this amiable duty; female educations are little calculated to form mothers, nurſes, or miſtreſſes of families; not one wife in a thouſand, when ſhe brings a child into the world, has the ſmalleſt idea of the charge committed to her hands; the huſband is generally better informed, at leaſt from reading, and it is neither beneath his dignity, or inconſiſtent with his province, to lend his aſſiſtance, in whatever concerns the corporeal or mental welfare of the being which he has contributed to produce.

To ſupply the child with wholeſome, natural, and nouriſhing food, and with warm, comfortable, and ſeaſonable cloathing; to give it ſuch a degree of exerciſe as the tender frame requires; to watch the approach of diſeaſe, and apply ſuch preventives as offer; to attend the progreſs of diſtemper, and adminiſter the remedies that are preſcribed; are offices of a nature ſo truly maternal, that the interference of any other hand ſhould in very few caſes be admitted.

In the very important article of cleanlineſs, the mother's eye is above all things neceſſary: nurſes and ſervants are but too apt to relax in their regards to the ſalutary regulations of neatneſs and delicacy; yet we may venture to affirm, that many lives are loſt by negligence in this particular, and that clean water, clean linen, and conſtant attention to the evacuations of infants, would prevent many diſeaſes, and in general confirm and ſtrengthen the moſt robuſt and beſt conſtructed conſtitutions.

The milk of the mother, and where, for the foregoing reaſons, that cannot be applied, of a young, wholeſome, and ſober nurſe, is the food apparently pointed out for an infant by Nature: ſhe has in general provided and prepared a quantity proper for it's ſuſtenance; and all endeavours to bring up children without the breaſt, are ſuch abſurd innovations on her dictates, that it is by no means to be wondered at that in ſuch attempts not one in fifty ſucceeds; and that even where they ſeem to thrive for a few weeks, or months, breeding the teeth, the ſmall-pox, and other diſeaſes to which young children are peculiarly liable, in frequent inſtances prove fatal to them.

Children commonly ſhew a diſpoſition to ſuck very ſhortly after their birth, and they ſhould unqueſtionably be immediately indulged, if the mother's milk begins to flow into the breaſt; and ſhould it be ſlow in it's progreſs, the natural induſtry of the infant will ſpeedily ſupply the deficiency: the firſt milk it can draw is the beſt medicine in the world to cleanſe it's little ſtomach and bowels of the matter acquired in the womb; and at the ſame time it contributes to the ſafety of the mother, by preventing milk-fevers, inflammations, and other complaints incident to women in child-bed.

But if the breaſt milk cannot be ſpeedily obtained, a little oatmeal gruel, or thin pap, mixed with new milk in equal quantity, or rather water, with the addition of a little moiſt ſugar only, without wine or ſpice, is the only food that can be given with ſafety, and without incurring the danger of heating the blood, and producing gripes, by over-charging the ſtomach.

Nor will the child need much other food of any kind, for the firſt three or four months, if the mother or nurſe is in health, and has a ſufficient quantity of milk. After that time, it ſhould be accuſtomed to take ſomewhat eaſy of digeſtion, once or twice in a day: water pap is the moſt common, and I believe the moſt light and wholeſome food; though ſome give the preference to oatmeal gruel, milk pottage, or weak broths with bread. As the child advances, the latter may poſſibly be beſt adapted to prepare for the change that will happen on weaning, as it is extremely neceſſary to guard againſt ſudden tranſitions. To avoid which, the food, even before, and for ſome time after it is weaned, ought to be wholly of a very ſimple nature, and either to conſiſt principally of milk itſelf, or to have as nearly as poſſible the ſame properties.

As ſoon as the child ſhews a deſire to chew, good, but not too new bread, may be given it in any reaſonable quantity: the action of chewing will facilitate the cutting the teeth, and helps the diſcharge of the ſaliva, or ſpittle, which is of a very nouriſhing quality, and agrees perfectly with the mother's or nurſe's milk; and if, inſtead of corals, or other hard ſubſtances with which the child is commonly ſupplied, as ſoon as it gives tokens of approaching teeth, by an inclination to chew whatever comes within it's reach, a cruſt of bread is put into it's hands, it will anſwer the double purpoſe of exerciſing the gums, and abating the heat and itching which accompanies the breeding of teeth, and at the ſame time will ſerve as a vehicle to convey into the ſtomach an excellent and medicinal aliment.

The quantity of food, though not of equal importance with the quality of it, is yet an object of great attention, by overloading their little ſtomachs, which is often effected by enticing them to eat of pap or gruel highly ſweetened, they grow fat, heavy, and inactive; the appetites of infants require no ſauces to quicken them, hunger only ſhould direct their meals, nor can any practice be more abſurd, than that of perpetually cramming them with food, which they are only induced to take by it's being made ſweet and palatable. Even as the child advances, bread firſt boiled in water, and then given in new milk, light broths of veal or chicken with bread, and bread puddings, without the addition of ſugar, will conſtitute a wholeſome and nouriſhing diet. Cuſtom has introduced an immoderate uſe of ſugar, which is apt to produce heats and acidities; and if the child has never taſted it, it will feel no loſs in the want of it. Nor ſhould the mother's milk be given in over quantities, ſo as to induce it to diſcharge what it has ſwallowed by vomiting, a practice too common, from an exceſs of motherly tenderneſs.

But the ſame care is likewiſe neceſſary, that the infant ſhould have ſuſtenance enough; for this purpoſe it's appetite ſhould be conſulted, and great regard paid to it's cravings for food: for different ſubjects, different quantities are required, and it is as impoſſible to limit the proportion of food, as it is to aſcertain the ſize of the body. As an over-quantity of food produces ſluggiſhneſs, and a habit of unhealthy fulneſs, ſo a deficiency occaſions watching, reſtleſſneſs, crying, and irritation. Of the two extremes, pinching children in their food is certainly the moſt dangerous; nature will diſcharge an overloaded ſtomach, but cannot ſupply the calls of hunger, or the ſtrength which muſt be derived from nouriſhment alone. The beſt rule that can be given, is to feed the child often, with moderate quantities; the contrary practice is deſtructive to the conſtitution, and ſhould be carefully avoided. A certain degree of regularity, as to the times of giving food, is of a great utility, as well as a ſtrict regulation that no more be offered to an infant after it diſcovers any tokens of loathing.

Animal food ſhould be given to children with a very ſparing hand; they ſhould not be ſuffered to taſte it till they have teeth, nor ſhould they be permitted to take it in any conſiderable quantity till after they are weaned. Fleſh occaſions heats, and produces inflammations, fevers, and other diſeaſes, which uſually affect groſs habits; and a vegetable diet only, is apt to turn ſour on the ſtomach: a due proportion of each, with the balance, however, in favour of the latter, is, without doubt, the moſt ſalutary regimen.

Over-fondneſs, and a deſire that the child ſhould participate in whatever the parents particularly eſteem, too often introduces a pernicious cuſtom of permitting it to partake of whatever comes to their table; by this means it is not only indulged in a very improper mixture of things actually hurtful in themſelves, but it acquires a reliſh for high-ſeaſoned meats, and rich ſauces, which, at all times noxious, in the early ſtages of life certainly vitiate the blood, and lay the foundation for a thouſand diſeaſes. Strong broths and ſoups, made diſhes, very fat meats, ſalted, ſmoked, and high-ſpiced proviſions, ſhould be totally baniſhed from the bill of fare for children, and ſtrong and fermented liquors of every kind ſhould be avoided with the ſame ſtrict attention. Light, plain, and ſimple food, in moderate quantities, preſerving a proportion of ſolids and fluids, and clear, pure and unmixed water, will lay in ſuch a ſtock of health and ſtrength as will enable the infant to combat the various diſtempers to which it is liable; and ſuch a regimen will diſarm the ſmall-pox, meaſles, hooping-cough, and other inflammatory diſorders, of the terrors with which they are uſually accompanied: but if ſome other drink muſt be given to them, let it be milk and water, whey, ſmall-beer of a proper age and fineneſs, or a very ſmall portion of wine mixed with their water; the latter however, is in moſt caſes better omitted.

From the liberal uſe of butter, children ſhould in general be reſtrained; it furniſhes them with groſs humours, and keeps the ſtomach in a conſtant ſtate of relaxation; a diſpoſition which ſhould be carefully avoided, as it ſubjects them to ſwellings in the glands, rickety complaints, and even the king's evil. Honey, or a ſmall quantity of preſerved fruits, particularly raiſins, may be ſubſtituted in it's place; the former is cleanſing, and efficacious in the prevention of worms and thoſe eruptive complaints to which children are ſubject.

Ripe fruits in moderate quantities, and of particular kinds, ſuch as ſtrawberries, raſberries, currants, and apples, far from being injurious to children, may in many caſes produce very good effects: they ſerve to cool and correct hot and acrimonious humours, promote digeſtion, and keep the body from being coſtive; but great care ſhould be taken that they are not indulged with them to exceſs, in that caſe they occaſion gripes, wind, and ſurfeits.

But we would by no means inſinuate that it is neceſſary to confine children to any conſtant courſe of food; if regard be had to the nature of their ſuſtenance, it is of little conſequence how often it is varied in form or ſubſtance: the appetite may pall by a continual repetition of the moſt admired diſh, and a change may be as neceſſary as reſtrictive cautions againſt exceſs.

Various opinions prevail with reſpect to the age at which the child ſhould be weaned; ſome recommend ſix months as the critical time, others prefer nine or twelve months, and many inſtances occur of very healthy families of children who have been accuſtomed to ſuck from eighteen months even to two years. The beſt direction that can be given on this ſubject, is to conſult the ſtate of health of the mother and infant, paying particular regard to the time of cutting teeth; it is cruel, and in a great degree dangerous, to deprive an infant of the food it can attain with moſt eaſe, at the moment it is ſtruggling under an operation painful in it's nature and frequently alarming in it's conſequences.

Alike doubtful is the queſtion with reſpect to the manner of weaning; many contend with earneſtneſs, that the breaſt ſhould be withdrawn by degrees, nor is the contrary conduct without advocates; but it is moſt probable that either method may be taken with ſafety, if the child is in perfect health, and due care be taken to keep it ſo, by adminiſtering ſmall quantities of rhubarb and magneſia, for a few days after the child has been weaned.

The next material article in the management of infants which falls under our conſideration, is cleanlineſs; a duty of ſuch indiſpenſible neceſſity, that from the neglect of it ariſe, we are perſuaded, many of thoſe diſeaſes which carry off children in the firſt ſtages, and many of thoſe which attend them, through the courſe of a life rendered miſerable by a want of attention in the outſet of it: it is aſtoniſhing, that a circumſtance of ſuch immenſe importance ſhould be ſo little regarded; and that a principal ingredient in the compoſition of health and beauty, ſhould be ſo frequently omitted, whilſt the fond mother eagerly purſues leſs effectual means to obtain for her darling child theſe invaluable bleſſings!

The ſkins of ſome new-born children are covered with a kind of ſlimy matter, more or leſs glutinous in different ſubjects, for the removal of which various methods are offered; but Caſtile ſoap and warm water, or if it adheres very obſtinately, the application of a little ſoft pomatum, will effectually anſwer the purpoſe; nor is it of any conſequence that it be all got off before the child is dreſſed, as what remains on the ſkin will in a few hours harden to a kind of dry ſcurf, which a linen cloth will rub off with eaſe: all other applications on this account are wholly improper and unneceſſary.

From the birth, the child ſhould be accuſtomed to a daily waſhing, from head to foot, in cold water; this may be done from a baſon without immerſion, care being taken not to omit any part of the body, and to wipe it very dry with a ſoft linen cloth: by the conſtant uſe of this ſpecies of cold bath, all diſagreeable ſmells will be taken off; galls, excoriation or ſtripping of the ſkin, and many diſeaſes which appear on the ſurface of the body, will be prevented, and the child will acquire ſtrength enough to reſiſt the attacks of colds, and ſuch diſorders as are in general produced by the inclemencies of the air, or the changes of the ſeaſons; for in the habit of acquiring ſuch diſorders in early infancy originate frequently rheumatiſms, ſciaticas, and other chronic complaints, which are uſually attributed to very different cauſes, but are for the moſt part owing to want of proper management in this firſt period of our lives.

The next object of the mother's care, ſhould be a frequent change of cloaths: the perſpiration of children being more copious than that of grown perſons, a greater degree of attention is neceſſary in this reſpect; foul cloaths, already ſaturated with the infant's juices, refuſe to admit more; the ſweat dries on the ſkin, ſtops the pores, and obſtructs a neceſſary diſcharge; and the cloaths themſelves become fœtid, hard, and uncomfortable, fret the ſkin, and bring on not only frowardneſs and fever, but actually occaſion diſeaſes of the ſkin, and encourage the generation of vermin. In the extremeſt ſtate of poverty, a certain degree of cleanlineſs is attainable, and whilſt water is to be had without expence, no excuſe remains for dirt and filthineſs.

But, above all things, the evacuations of an infant ſhould be attended to; nor, if poſſible to be avoided, ſhould they remain unchanged a ſingle minute; rickets, weakneſs, and ſwelled joints, are the certain effects of inattention in this momentous article, and the leaſt dangerous conſequences are galling, fretfulneſs, and a certain degree of feveriſh heat, the ſymptoms and harbingers of worſe complaints.

Combing the heads of infants ſhould by no means be neglected; they are apt to acquire a kind of ſcurf beneath the hair, which ſtops the pores, and is productive of head-ach and weak eyes; to which, from the mere omiſſion of this uſeful operation, moſt young children are ſubject: but a fine comb and very tender hand are required in the performance of this taſk.

For the cloaths of infants few general directions can be given, except as to quantity; great care ſhould be taken that they are not kept too warm; the heat of a child-bed room, the additional warmth of the mother's bed when the child is applied to the breaſt, and the fever, which from violent agitation, effects more or leſs every child after the birth, make ſuch a caution abſolutely neceſſary; and if the child is intended to be ſent out of the houſe to nurſe, a regulation in this reſpect is the more indiſpenſible, as it is ten to one but in it's new habitation it is expoſed to a degree of cold which it would not have endured at home even in a ſtate of abſolute nakedneſs.

An exceſſive quantity of cloaths is on all accounts to be avoided; but a ſtill greater degree of danger attends the common manner of putting them on, and on this ſubject ſome particular directions are requiſite.

For many centuries, the whole apparel of infants was included in the general denomination of ſwaddling, (a corruption of ſwathing-cloaths;) and they were ſo called, becauſe the bodies and heads of the wretched little patients were encircled in repeated and redoubled applications of rollers, bandages, and binders.

No ſooner was the poor little animal born, than it was abandoned to the cruelty of midwives and nurſes, the handmaids of female vanity, and doomed by theſe merciless operators to a ſpecies of torment, ſufficiently ſevere at the moment of infliction, but productive of the moſt alarming conſequences in future; ſwathed, ſwaddled, plaited, folded and pinned, it was reduced to the form and almoſt condition of an Egyptian mummy, and exhibited to the viſitors as a ſpectacle of finery, and a proof of the ſuperlative ſkill of the attendants; it's tender cries and impatience at it's fetters, exciting no compaſſion, or procuring the leaſt hopes of emancipation.

No methods, ſhort of actual blood-ſhedding or violence, could be ſo effectual to accompliſh the deſtruction of the unhappy victim, or to conſtitute a certain proviſion for the miſery of it's future life.

Strictures and ligatures, on the tender frame of an infant, were originally introduced from an ignorant and miſtaken idea, that they would operate as preventives againſt corporeal deformity; a fatal miſapprehenſion, yet an error of ſo palpable a nature as to be corrected by common experience, and the ſlighteſt intervention of human reaſon.

Examine the brute creation—unencumbered with cloaths, unreſtrained by bandages, and ornamented only by the hand of nature—and you will find no inſtances of deformity but ſuch as are occaſioned by exterior accident, either to the parent mother or the infant young. Carry your enquiries farther, and among uncivilized nations ſuch inſtances are equally rare. Is any other proof neceſſary to ſupport an aſſertion, that deformity is promoted, in a very high degree, by the very endeavours which are uſed to prevent it; or that nature is much leſs concerned in the diſtortions of the human body, than the various efforts of art, practiſed on the pliant and yielding forms of infant ſufferers?

In the womb, nature has provided againſt poſſible preſſure, by ſurrounding the child on every ſide with fluids, protecting it from external injury, and leaving it's motions free and confined; yet no ſooner did it eſcape from this indulgent priſon, than it was cramped in ſtrait cloathing, and condemned to be forced into poſtures equally unnatural and injurious.

The body of an infant conſiſts of an infinite number of tubes, filled with fluids in perpetual motion, and it's bones are ſo tender and flexible to facilitate the purpoſes of growth, that they are affected by the ſlighteſt reſtrictions; when the cloathing is troubleſome or uneaſy, the child ſhrinks naturally from the offended part, and having acquired a habit of doing ſo, fixes in ſome unnatural ſhape which it muſt retain for life. Natural weakneſs or diſeaſe may in certain caſes occaſion deformity; but very far the greater part of the inſtances which occur, are produced by miſmanagement in cloathing.

Nor is the exterior form alone ſacrificed to this abſurd cuſtom of bracing up the infant body; the conſtitution ſuffers equal injury. Reſpiration, the circulation of the blood, the operations of the lungs, all the various motions which take place at the birth, are obſtructed and impeded in their firſt efforts; and it is an obſervation, the truth of which daily experience juſtifies, that deformity of body is ſeldom accompanied by health or vigour.

All the cloaths neceſſary for an infant are, a light cap on it's head, a little linen ſhirt next it's body, a thin flannel garment without plaits or folds, and a looſe gown; all theſe ſhould be faſtened with ſtrings inſtead of pins, a ſpecies of offenſive weapons too often applied to the child's body as well as it's cloaths, and if a cloth to receive the evacuations be added, the child will be compleatly dreſſed for all the purpoſes of neceſſary warmth and comfort: whatever elſe is admitted, can only be for the gratification of pride, or the compliance with wretched cuſtoms, which are already in many parts of the kingdom juſtly exploded as highly injurious to the little objects of our care; an opinion which, for the preſervation of the human race, we earneſtly hope will very ſpeedily become general.

How many of our fair countrywomen have at this moment reaſon to deplore the pernicious, and once univerſally prevalent practice, of confining growing girls in ſtrait ſtays, a practice productive of all the evils we have juſt enumerated; but which ſeems now to be happily loſing ground, from the operations of ſenſe, and the conviction of woeful experience, that unequal ſhoulders, flat breaſts, and crooked backs, are the natural conſequences of ſtiffened garments and tight lacing.

If the mother is really incapacitated from ſuckling her child, great care ſhould be taken in the choice of a nurſe. A healthy infant at her breaſt is in general a very good direction: yet this is not always to be depended on; a naturally ſtrong and healthy conſtitution derived poſſibly from the father, and the air of the country, will frequently throw a bloom over the countenance of the child, for which it is not indebted to the mother.

The uſual deſcription of good milk is, that it be rather thin than groſs, of a colour inclinable to blue, and that it be ſweet and perfectly free from any pungent or ſaline taſte on the tongue.

To ſound health, a good conſtitution, and a body perfectly free from every kind of eruption, and a breaſt well ſtored with good milk, ſhould be added care, cleanlineſs, and a great ſhare of good-nature. General fondneſs for children is rather an equivocal proof of a good nurſe; what degree of affection can we ſuppoſe any woman will bear to the child of another, who, for the ſake of gain, can bring herſelf to abandon her own offſpring, or to commit a robbery on both, by dividing between them the nouriſhment allotted by Providence to ſuſtain the fruit of her own womb only: if this circumſtance was duly conſidered, it might probably go no inconſiderable way towards the abolition of a cuſtom, founded principally on idleneſs, and practiſed even to inhumanity.

If the child is nurſed at home, and the mother pays any degree of attention to it, ſhe will keep a ſtrict watch over the conduct of her nurſe, and by that means diſcover her vices, habits, and bad cuſtoms; of the former, drunkenneſs is the moſt common, becauſe it may in general be indulged without much riſque of diſcovery. Mothers are very apt to permit the uſe of large quantities of ale, and other fermented liquors, from an apprehenſion that it encreaſes and enriches the milk; the contrary of which is undoubtedly true. Large draughts of inflammatory drink, ſerve to leſſen the quantity, and deſtroy it's purity;

ſpirituous liquors of any kind have ſtill worſe effects. Fine table-beer, of a proper age, and light broths and gruels, are the moſt wholeſome fluids that a nurſe can ſwallow, and will beſt anſwer the purpoſe of preparing ſweet and innocent food for the child. Her food ſhould as nearly as poſſible be ſuch as ſhe has been accuſtomed to, nor ſhould ſhe omit to take her uſual exerciſe. Inattention to theſe rules will prove truly injurious to the infant.

It is by no means unuſual with nurſes, if the child is reſtleſs, or diſinclined to ſleep, to quiet it with ſtupifying drugs, to ſave themſelves the trouble of attending it: theſe are all of the moſt pernicious and fatal conſequence; as well as ſtrong liquors, another ſpecies of poiſon, too often adminiſtered for the ſame purpoſe, the operation of which, though ſomewhat more ſlow, is equally ſure to deprive the unhappy infant of the benefit of a good conſtitution, if not of life.

Parents ſhould lay the ſtricteſt injunctions on nurſes, never to practiſe on the healths of their children, or to conceal any accident they may meet with, or any diſorder that may attack them, in conſequence of negligence or want of care: the attempts of ſuch extremely ignorant perſons to adminiſter medicine, may be, in many caſes, of fatal tendency; and the concealment of accident or diſeaſe, often prevents proper application, till it is too late; and caſes which, if taken in time, might be eaſily ſubdued, are ſuffered to run on till they become incurable, and end but with the patient's life.

The adminiſtration of medicine, without conſulting the parents, ſhould be abſolutely prohibited; nine times in ten it is given improperly, the efforts of nature frequently throw out in eruptions on the ſkin ſuch bad humours as threaten infants with fevers, and other violent diſeaſes. Nurſes are too apt to treat ſuch eruptions as infectious diſorders, and uſe means to repel them. Attempts of this kind, which go in direct oppoſition to nature, are always dangerous, and very often fatal. No eruption ſhould ever be haſtily ſtopped, nor even checked, till the nature of it be fully aſcertained.

Hired nurſes, who are actuated by no affection towards the tender beings committed to their charge, are in general inſenſible to their cries; and the poor little wretches are frequently permitted to exhauſt their ſpirits in fruitleſs wailing, without the ſmalleſt endeavour to lull them to quiet, or ſoothe their anguiſh, though not unfrequently occaſioned by pins, wetneſs, or ſome other act of the nurſe's careleſſneſs. By this unfeeling inattention, they are ſuffered to ſtrain their little bodies; though inflammations of the lungs, ſore throats, nay even ruptures, are the almoſt certain conſequences.

The trouble occaſioned to nurſes by frequent ſtools, is commonly avoided by giving the infant aſtringent medicines; a moſt horrid practice, as this is the channel by which nature in general works, to cleanſe the infant body from impurities, and to counteract her operations, is to add one diſorder more to thoſe ſhe means to relieve. If the looſeneſs is violent, it moſt probably proceeds from acidities, which a ſmall quantity of rhubarb, and magneſia alba, or a gentle vomit, will in moſt caſes infallibly correct; at leaſt, aſtringents ſhould never be permitted, till the others have been firſt uſed as preparatives.

But one of the principal faults of mercenary nurſes, is their denying to the children entruſted to their care, *air* and *exerciſe*.

In great and populous cities, and in large manufacturing towns, where the inhabitants are crouded together, in narrow confined ſtreets, and low, dark, and dirty houſes, it is no wonder that the children ſhould be ſickly, and that a very few, comparatively, ſhould arrive at maturity.

Grown perſons, however hardy and robuſt, are generally affected by ſuch ſituations; but their children ſeldom ſtruggle through infancy, or if they do, are commonly marked by deformity or weakneſs. The like fate, and for the ſame reaſons, generally attends the unfortunate infants who are conſigned to hoſpitals, work-houſes, and other public and charitable inſtitutions: this is a misfortune inſeparable from poverty; but it is the duty of ſuch parents as can well afford the expence, to place their children in a dry, healthy, and airy habitation; and to enforce, by the ſtrongeſt injunctions, and frequent viſits, the carrying them out in the open air, many times in the day. Nurſes left to themſelves, are too apt to indulge a habit of indolence in this eſſential article.

Small apartments are totally unfit for nurſeries, nor ſhould ſeveral beds be ſuffered in one room; children are relaxed by the heat, and rendered delicate, and liable to colds; added to which, the air of confined or crouded rooms is unwholeſome in itſelf, and diſpoſes them more readily to receive the infection of contagious diſeaſes. Nor is the practice leſs dangerous, of covering up the infant cloſely in the cradle, depriving it of the comfort of breathing, and compelling it to ſwallow again, in repeated draughts of reſpiration, the ſame air it has emitted. If ſmall beds could be provided for children, as ſoon as they are weaned, with bed-cloaths ſeparate from thoſe of the parent or nurſe, it might produce very happy effects.

If children are laid to ſleep with all their cloaths on, great care ſhould be taken not to expoſe them to the open air immediately on their being taken out of the cradle; the ſafer way is to undreſs them in a great meaſure before they are put to reſt, and to reſtore their cloaths as ſoon as they awake: no cuſtom can be more abſurd, than that of heaping additional cloathing on them in the cradle, where they have naturally ſufficient perſpiration to induce an extraordinary degree of it, which is violently checked the moment they awake, to the extreme hazard of their lives.

Nor ſhould children, as they grow up, be confined to warm rooms, or kept wholly within doors; at a certain age they are ſent to public ſchools, and other places of education, where the treatment is ſo different, that, like exotics, they ſhrink at the expoſure, and never attain any conſiderable degree of vigour or ſtrength. And the like inconvenience ariſes from bringing children, who have been accuſtomed to wholeſome country air, to ſchools in confined towns, where their improvement in learning is frequently impeded by the loſs of health, at a time, too, when the application of every hour is of ineſtimable value.

To prolong and render comfortable the life of man, *exerciſe*, is indiſpenſibly neceſſary; the health, growth, nay even the very exiſtence of the infant, depend on it.

The nature of the exerciſe ought to be adapted to the age of the child, and to be increaſed by degrees, as it gains ſtrength of body; but it muſt, in many caſes, be regulated by the condition of the parents. Rocking in the cradle has been the practice of centuries, and moderately uſed may not be an improper kind of exerciſe; but the mother's or nurſe's arms is the moſt eaſy and natural; being carried from place to place, a variety of objects offer, which amuſe it's fancy, and under the information which it receives from it's conductor, directs it's opening ideas. Where actual poverty prevents this kind of exerciſe, frequent rubbing of the back and loins with a warm hand, will be of ſingular uſe. Even a ſwing, not high enough to ſuſpend the infant, is preferable to the uſual method of committing one child to the care of another; but both ſhould in every poſſible caſe be avoided: and if mothers would dedicate more of their time to their children, at this period of their lives, they would be repaid by the forward growth and ſtrength of their offspring, who would be much more quickly in a capacity to take care of themſelves.

If the nature of our undertaking permitted us to conſider the ſtructure and œconomy of the human body, no other arguments would be required to enforce the neceſſity of exerciſe; and when we reflect that the circulation of the blood, and all the animal functions, depend on it, no doubt will remain of the dangers which attend it's neglect.

It is a common, but very miſtaken notion, that children acquire crooked legs and rickety habits, from being indulged too early in the uſe of their feet; but as exerciſe contributes to the ſtrength of the limbs, theſe infirmities are much more probably derived from their being kept too long in a ſitting or lying poſture: if their limbs are weak, the weight of their bodies is proportionable, and the moment they have ſkill to keep themſelves erect, they may very ſafely be ſuffered to uſe their legs. Leading-ſtrings ought never to be permitted; children who are accuſtomed to them are apt to depend entirely on this ſupport, by which means their whole weight is thrown forward, and the lungs, ſtomach, and bowels, ſuffer an unnatural and dangerous compreſſion. Sedentary employments of any kind, whether of ſtudy or labour, are extremely prejudicial in childhood and early youth: when the calls to either are not to be diſpenſed with, it will be of great importance to divide the hours of application and receſs, in ſuch a manner as to give frequent opportunities for exerciſe, which ſhould always be taken in the open air if poſſible. And theſe precautions are more particularly neceſſary for female children, who will feel the want of early air and exerciſe, not only at a certain critical period of life, but in the ſtill more dangerous circumſtance of child-bearing; an event attended with a degree of hazard to all, but moſt to thoſe whoſe parents or friends have neglected to improve their ſtock of health and vigour in the precious moments of which we now ſpeak.

Having laid down a few neceſſary and fundamental rules, for the management of infants in health, we ſhall now proceed to treat of their *diſeaſes*; but as there are certain accidental circumſtances which ſometimes affect children at the birth, and which yet are not to be claſſed under that head, we will firſt enumerate thoſe, and offer directions and remedies ſuited to each particular caſe.

On the examination and inſpection of a new-born infant, enquiry is generally made if it be tongue-tied; this ſometimes, though very rarely, happens. A thin ſkin or membrane under, and extending towards the narrow part of the tongue, prevents the child from ſucking, and may be remedied by a very gentle ſnip with a pair of fine ſciſſars: but this circumſtance ſo ſeldom occurs, that when the child exhibits an inability to ſuck, the impediment will much more commonly be found in over-full breaſts or ſore nipples of the mother, or in ſwelling of the glands, or weak jaws, in the infant. The operation of cutting ſhould therefore never be performed without attending to theſe other poſſible grounds of the complaint.

It is ſaid, that there have been inſtances of children born with their tongues inverted or turned, or that the ſame accident has happened from ſucking: tickling the child's throat, to excite vomiting, has been recommended in this caſe, as the only means to prevent immediate ſuffocation.

The breaſts of infants are generally found to contain a ſmall quantity of milky fluid, but this ſhould by no means be drawn or preſſed out; warm milk and water, or a little ſweet oil warmed and gently rubbed in, will in moſt caſes remove it; or if it ſhould remain beyond a day or two, a poultice of bread and milk is an effectual remedy. A ſmall plaiſter of diachylon is in ſome inſtances preſcribed, when the breaſt grows hard; but the nurſe ſhould be abſolutely reſtrained from uſing her finger and thumb, a practice both cruel and dangerous.

If too much of the chord, or navel-ſtring, is left to the body of the child, it is apt to occaſion inflammation; nay, in ſome caſes, even mortification. The beſt way of managing it is, to make a hole in a piece of fine linen, many times doubled, and paſſing the end of the navel-ſtring through the hole, to fold the cloth ſeveral times, till it gets near the belly; to which it ſhould be bound by a ſmooth roller, but not drawn too ſtrait. The navel-ſtring commonly ſeparates, and falls off, in four or five days; when that happens, which ſhould be carefully attended to, a bit of ſinged rag may be laid over the navel; and if any rawneſs or ſoreneſs ſhould appear round it, or the ſkin ſhould be fretted or galled, a raiſin ſplit and ſtoned may be applied, and the part waſhed with a little allum-water, or a weak ſolution of ſugar of lead, and a plaſter of cerate applied, to protect it from rubbing.

When the navel appears to protrude, or puſh out, it is frequently miſtaken for a rupture; but, as the latter is by no means a common caſe, all violent attempts to reduce it ſhould be carefully avoided: nor ſhould they be made, but with infinite caution, in infant ſubjects, even in caſes of actual ruptures in the groin. The body may be kept open, and the hand gently applied to the part, when the child makes any extraordinary exertion, either by crying or otherwiſe. And, as this complaint is not of a dangerous nature, a cure will generally be effected without the application of bandages or truſſes, which ought always to be uſed by very ſkilful hands.

If the retention of the infant's urine ſhould afford any reaſon to ſuſpect that the paſſage from the bladder is obſtructed by a ſlimy matter, which ſometimes oppoſes the paſſage of the water, a warm bath of milk and water, or a little oil gently rubbed on the belly, will in moſt caſes remove the complaint; but, if theſe applications prove ineffectual, it will be neceſſary to conſult ſome perſon of judgment, as it may then be apprehended that the difficulty ariſes rather from ſome defect than from accident; eſpecially in female infants, where the cauſe is not always to be found in the paſſage from the bladder, but in a kind of thin ſkin which cloſes it's orifice or mouth; and the ſame appearance ſometimes preſents itſelf at the gut, and prevents, in like manner, evacuation by ſtool: it is very proper, therefore, that the infant's body ſhould be repeatedly and carefully examined, and that attention be paid to the regularity and freedom of it's evacuations.

The noſes of infants are ſometimes ſtopped up by groſs matter, which, gathering in the noſtrils, occaſions difficulty in ſucking, and even obſtructs their breathing: a little oil or butter applied to the noſe by a warm finger, will ſcarce ever fail to remove this complaint; but ſhould it refuſe to yield to theſe common and gentle preſcriptions, two grains of white vitriol may be diſſolved in about half an ounce of marjoram-water, and applied to the noſtrils with a fine rag.

Running ears, ſore or weak eyes, and excoriations, galls, or ſtripping of the ſkin, may, in general, be attributed to the ſame cauſes; the former and latter are almoſt conſtantly the effects of want of care and cleanlineſs, and may be removed by a careful attention to theſe eſſential articles. In the former caſe, a little cerate plaſter may be applied; or, if extremely obſtinate, a very weak ſolution of ſugar of lead may be uſed to waſh the part: in the latter caſe, the arm-pits, groin, or other galled parts, may be powdered with fine tutty, or even common hair-powder; but the moſt effectual remedy is fullers-earth diſſolved in warm water, and when made quite ſoft and ſmooth applied with the finger.

Sore eyes are in general occaſioned by the neglect of waſhing the infant's head with water from it's birth. Where that method is practiſed, this complaint ſeldom occurs, though it may ſometimes happen, by expoſing it ſoon after the birth to a very ſtrong light, or placing it too near the fire. In both caſes, the moſt ſimple applications are the ſafeſt; and frequent waſhing with milk and water, or roſe-water, will in general remove all the diſagreeable effects of this diſorder.

CHAP. II.

Of the Diſeaſes of Infants.

THE *meconium*, which is ſo little conſidered as a diſeaſe, that it has not yet acquired any Engliſh name, is the excrement contained in the ſtomach and guts of a new-born infant; and which was formerly thought to poſſeſs very dangerous qualities, and to require the immediate aſſiſtance of purgatives to carry it off: but the mother's milk has been long conſidered as the moſt efficacious medicine, and ſcarce ever fails to promote the diſcharge of it. If the mother does not ſuckle, or the breaſt is not ready to receive it, a little magneſia, or even moiſt ſugar diſſolved in warm water, will anſwer the purpoſe.

The *red-gum* requires little more attention than to keep the body open; which may be done by ſmall doſes of rhubarb powdered and magneſia, mixed in warm water. The *yellow gum*, which is indeed a ſpecies of jaundice, is attended with ſome degree of danger; but the ſame medicine may be adminiſtered: and in many caſes a change of milk is required.

The ſymptoms of *acidities* in the ſtomach of an infant, are at firſt loathings and ſour belchings, a pale complexion, with frequently a yellow or green caſt, wind, red ſpecks or ſpots in the forehead, cheeks, or neck, a thick breath attended with a ſnoring noiſe, and not uncommonly a ſharp and troubleſome cough. Gripings, purgings, and green and ſour-ſmelling ſtools, are the ſure ſigns of acidities in the bowels. In both caſes, the beſt medicine known is magneſia, which may be given either in it's common food, or in the following prepared mixture.

> Six grains of powdered rhubarb—thirty grains of magneſia—ſimple mint-water, half an ounce—ſyrup of ſugar (or ſugar diſſolved in as much boiling water as will reduce it to the conſiſtence of ſyrup) half an ounce—common water, an ounce.

Somewhat more than the quantity of a tea-ſpoonful may be adminiſtered every three or four hours.

But, as this medicine is evidently calculated to act as a purgative, as well as to correct the acids in the ſtomach and bowels, in caſe the body ſhould be already ſufficiently open, a like quantity of prepared powder of crabs eyes may be ſubſtituted for the magneſia; though the latter may, in moſt occaſions, be uſed with ſafety and ſucceſs.

If the ſame complaints occur after the child is weaned, an infuſion of about fifteen grains of powdered rhubarb, and one grain of ſalt of tartar, in any ſimple water, poured carefully off after it has ſtood near the fire a few hours, may be given in the quantity of two ſmall tea-ſpoonfuls at a time, and repeated twice or thrice in the twenty-four hours: you may add ſugar, to make it palatable.

If the gripes are ſevere, and the mixture above recommended has not procured ſtools, a ſmall quantity of peppermint-water, diluted with common water warm, may be given, and a flannel dipped in brandy or other ſpirit applied to the belly; and a gliſter of a table-ſpoonful of Florence oil, the like quantity of coarſeſt ſugar, and from two to four ounces of new milk, or the decoction of linſeed, ſhould be immediately adminiſtered. Proper care muſt be taken that the heat of the injection do not much exceed that of milk from the cow.

For vomitings occaſioned alſo by acidities, no medicine is more effectual than the magneſia and rhubarb mixture; but if the continuance of the complaint has ſo weakened the ſtomach, that it can neither retain food or medicine without loathings or actual vomitings, from two to five grains of ipecacuanha, according to the age of the infant, may be very ſucceſsfully given; it ſhould be finely powdered, and mixed with ſugar and water, or the common ſyrup, and it's operation is mild and ſafe.

If the vomiting is apprehended to proceed from an irritation of the nerves of the ſtomach, a drop or two of liquid laudanum may be given in a table-ſpoonful of the ſaline draught, which may be compoſed of

> Thirty grains of ſalt of wormwood or tartar, diſſolved in half an ounce of freſh lemon-juice—half an ounce of common ſyrup of ſugar—one ounce of ſimple peppermint-water—and one ounce of common water.

And the like quantity may be repeated every two, four, or ſix hours, according to the violence of the diſeaſe, leſſening, however, the quantity of the laudanum in the repetition.

If the diſorder is obſtinate, the following plaſter, from the ſize of a crown-piece in proportion to the age of the patient, ſpread on ſoft leather and applied to the pit of the ſtomach, may be uſed with great probability of ſucceſs.

> Take gum labdanum, or plaſter of the gums, of either three ounces—camphorated oil half an ounce—black pepper, or Indian pepper, three drams—eſſential oil of mint or mace, two ſcruples.

Melt the ingredients in a ſmall earthen pipkin or pot, ſtirring in the powdered pepper as it diſſolves, and adding the oil of mint or mace in the laſt ſtirring.

When the ſymptoms abate, it may be proper to ſtrengthen the ſtomach by the following medicine.

> Infuſe one dram of Peruvian bark—ſix grains of rhubarb—and a ſmall quantity of orange peel—in one ounce of ſimple cinnamon water, and one ounce of common water.

And after it has ſtood three hours, ſtrain it carefully off, and give the quantity of a tea-ſpoonful morning and evening.

But, after all, vomiting may be occaſioned by the quantity or quality of the infant's food. The matter thrown up will in a great meaſure aſcertain the former cauſe, and the cure is too obvious to need pointing out: in the latter, a change is neceſſary even of the breaſt milk, if that ſhould be found too groſs or heavy; at leaſt, the mother or nurſe ſhould have recourſe to a more ſpare diet, and diluted liquors, in order to render her milk leſs thick and glutinous.

The ſymptoms which indicate the approach of the *thruſh*, are lowneſs and depreſſion of ſpirits, extreme weak pulſe, difficulty, or almoſt ſuppreſſion of breathing, and univerſal languor; as the ſpots riſe on the ſurface, the pulſe gets more ſtrong and quick; a fever enſues, attended with want of reſt, and general uneaſineſs; the extreme ſoreneſs of the infant's mouth prevents it's ſucking; and blood and even convulſion-fits frequently follow it's attempts.

The diſeaſe itſelf appears in the form of ſmall white ulcers, like ſprinkling drops of any milky matter, ſpreading externally over the whole mouth and it's contents, the lips, jaws, cheeks, tongue, palate, gullet, and according to the opinion of many eminent phyſicians extending through the ſtomach and inteſtines, even to the excrementary paſſage at the fundament, where they may ſometimes be traced.

Theſe ulcers are fewer or more in number, according to the degree of malignity with which the infant is affected; in the firſt ſtages of the diſeaſe, they are thinly ſcattered over the diſtempered parts, are of a pale colour, and a clear appearance, and yield to the ſlighteſt touch: this ſtate of it, as it neither prevents the child from taking it's food, nor interrupts the functions of nature, is attended with little danger; but if it is ſuffered to gain ground till the ulcers are ſo thick that they run together, and aſſume a yellow, brown, or dark colour, the infant will be unable to ſuck, and the little food it can convey into it's ſtomach will be prevented from mingling with the blood, and afford it no nouriſhment. Such part of the ſkin as is diſcoverable betweeen the ulcers, generally appears in an inflammatory ſtate; if it aſſumes a livid colour, it is a ſymptom that generally denotes fatal conſequences; vomitings, belchings, and purging with ſour ſtools, are alſo indications of a very diſagreeable nature.

When theſe ulcers form a cruſt, it will frequently fall off and be ſucceeded by a ſecond eruption; this alſo is a very unpromiſing ſymptom, and particular caution ſhould be had not to attempt rubbing off the cruſt; for as often as that is done new ſpots will appear, which are rooted ſtill deeper at every return, and contribute to affect the part more ſenſibly, and weaken the patient.

As this diſorder proceeds alſo from acid humours, they ſhould be immediately corrected: for this purpoſe, the magneſia and rhubarb mixture may be freely given, ſweetened with honey of roſes inſtead of ſimple ſyrup; but if this medicine ſhould occaſion ſtools more frequently than three or four times in twenty-four hours, it may be proper to uſe the powder of prepared crabs eyes inſtead of magneſia, and to admit a drop or two of laudanum.

By way of gargle or waſh for the infant's mouth, five grains of white vitriol diſſolved in four ounces of bran tea may be uſed, or a ſlight decoction of the bark, with the addition of a drop or two of ſpirit of vitriol, or even port wine or claret diluted with warm water; but either of theſe waſhes ſhould be paſſed into the mouth by very ſmall quantities at a time, by which means it will ſpread more effectually over the affected parts, and be conveyed into the ſtomach and inteſtines. This is a much better method than ſcouring the child's mouth with a rag on a ſpoon or ſtick; which, for the reaſons before mentioned, rather ſerves to increaſe than relieve the diſorder. The mouth of the infant, and the mother's or nurſe's nipples, may alſo be gently touched with gum Arabic, or dragon's blood, diſſolved in warm water to the conſiſtence of a thin jelly; cream may alſo be uſed for the ſame purpoſe.

Vomitings in the courſe of this diſeaſe ſhould be aſſiſted by two or three grains of the powder of ipecacuanha, or half a grain of emetic tartar diſſolved in an ounce and a half of water, and adminiſtered in the quantity of one or two tea-ſpoonfuls, according to the age of the child.

If the infant refuſes the breaſt, it will be neceſſary to convey ſuſtenance into it's body by clyſters; theſe ſhould be compoſed of thin broths, or even pap ſtrained for the purpoſe: bliſters may perhaps be applied with ſome hope of relief, and ſtrict obſervation ſhould be made whether the diſinclination ariſes from any cauſe in the milk, ſuch as it's being too groſs, or the contrary, in either of which caſes immediate recourſe ſhould be had to a change.

After the diſeaſe is removed, the parts which the eruptions and cruſt have weakened, may be reſtored to firmneſs, by putting frequently into the mouth a little ſyrup of dried roſes, or honey of roſes, to which may be added a ſmall quantity of Armenian bole.

Infants at the breaſt are alſo ſubject to various other kinds of eruptions; but they are, in general, ſo far from being injurious, that they may be conſidered as efforts of nature to diſcharge groſs or acid humours: no attempts, therefore, ſhould by any means be made, to free the ſkin from them by external applications; nor ſhould medicine be directed for that purpoſe, without extreme attention to the conſtitution of the child, and the ſtate of it's body.

The cauſes of other eruptions, beſides theſe critical ones, have been already ſhewn in the foregoing chapter. They may principally be attributed to impropriety of food, both as to the matter of which it is compoſed, and the manner of taking it; or to careleſſneſs, and neglect in the great article of cleanlineſs: in both caſes, the cure will be effected by the neceſſary regulations; the correction of the aliment, and the reſtoration of cleanlineſs, will leave no occaſion for the efforts of medicine.

Eruptions of different kinds are frequently miſtaken for the *itch*; and the uſe of greaſy ointments has, in many inſtances, produced unhappy conſequences: before any ſuch meaſure is adopted, it will be perfectly right to try the effect of magneſia, with rhubarb, and ſuch other cooling and correcting medicines; which will generally perform an effectual cure, without the aſſiſtance of ſulphur and hogs-lard; the only ſuperficial remedy that ought ever to be permitted.

But in all eruptive complaints, to keep the body open and cool, and at the ſame time to avoid taking cold by improper expoſure, or violent exerciſe, and to adopt a mild and temperate regimen, ſeem to be the moſt effectual means that can be uſed to enſure a ſpeedy and effectual removal of theſe diſagreeable appearances.

It may be neceſſary to caution our readers againſt conſidering and treating *looſeneſs* in infants as a diſeaſe; it is in many caſes, in itſelf, of a very contrary nature; and the cauſes, not the effects, ſhould be attacked by medicine: the beſt which can poſſibly be offered is magneſia; which, either alone, or with the rhubarb, according to the degree of the diſorder, will firſt alter the appearance of the ſtools, by correcting thoſe acids which have occaſioned their green colour, ſlimy conſiſtence, and fœtid ſmell; and by perſiſting in the uſe of it, will, in moſt caſes, reduce the quantity of the diſcharge, without giving it ſo ſudden a check as to endanger worſe conſequences. When the purging is accompanied with ſuch violent pains in the bowels, as to call for immediate alleviation, from two to ſix drops of laudanum, according to the age, may be given; and where the ſtools are ſharp and ſcalding, ſtripping the ſkin as they paſs, clyſters will be neceſſary.

Theſe clyſters may conſiſt of a tea-cup of gruel, or of thin mutton broth, with a ſmall quantity of ſweet oil, and a few drops of laudanum; but, if the ſtools exhibit no unnatural appearance, the common clyſter of warm water, milk, and ſweet oil, will anſwer the purpoſe.

The *riſing of the lights*, a diſeaſe known alſo by the names of the *croup* or the *chock*, is a kind of aſthma or ſuffocation; and may be occaſioned by cold, damp, or any circumſtance that tends to ſuppreſs perſpiration. It is ſeated in the cavity of the windpipe, and conſiſts of the matter ſeparated there, becoming ſo thick as to obſtruct the free paſſage of air into the lungs.

A voice uncommonly ſhrill, clear, and ſharp, is the firſt indication of this diſorder, which, of all others, has the moſt flattering, though not leaſt dangerous appearance; for during the courſe, and even to the moſt fatal termination, it ſeems to be attended with no other complaint than a quickneſs or ſhortneſs of breath, accompanied with a ſnoring noiſe; the pulſe is quick, and at firſt high, but it declines in the progreſs of the diſeaſe, and falls remarkably low and weak, as the patient's caſe grows deſperate.

But this diſorder may be found in different ſituations, and deſcribed by very different ſymptoms: when it is attended with all or any of the marks of inflammation, ſuch as high colour, ſtrong pulſe, and conſiderable thirſt, bleeding and evacuation by clyſter (if neceſſary) are recommended, immerſion of the lower parts in warm water, breathing over the ſteams of warm liquids, ſuch as camomile tea and vinegar, or vinegar and warm water; flannel cloths dipt in a fomentation of camomile tea, and then ſprinkled with camphorated ſpirits of wine, may be applied round the neck, and cataplaſms, or poultices, of white bread and milk and ſweet oil.

Aſafœtida has alſo been preſcribed, and may be adminiſtered by diſſolving twenty grains of it in one ounce of ſimple mintwater, and ſweetened with common ſyrup; but as from the nauſeouſneſs of this medicine it is extremely difficult to get it down, it may be conveyed into the body by giving the ſame quantity of aſafœtida in a clyſter of thin chicken broth, or milk, water, and oil.

The rapid progreſs of this diſeaſe, which is frequently critical in two, three, or four days, points out in ſome caſes the immediate neceſſity of applying a bliſter round the neck, and of bleeding; but if the pulſe continues firm, and the difficulty of breathing does not increaſe the ſecond or third day after ſeizure, there are great hopes of the patient's recovery, without either loſing blood or bliſtering.

Upon the whole, it will be underſtood, that as this diſorder puts on ſeveral different appearances, it will be neceſſary to adapt the treatment and medicines to the various ſymptoms, always remembering, that the low and languid ſtate of the diſeaſe, is more dangerous than the feveriſh and inflammatory; becauſe in the latter caſe, variety of remedies preſent themſelves; but in the former, little more can be done than to aſſiſt the operations of nature, by the external applications before directed.

As this diſorder is in ſome meaſure local, children inhabiting low and damp ſituations, and the flat coaſts of rivers communicating with the ſea, being found moſt liable to it, it will be neceſſary to guard againſt frequent returns, by avoiding wet, cold, and expoſure to ſharp winds.

If the infant who has been ſubject to the attacks of this diſeaſe is of a groſs habit, it will be neceſſary to regulate it's diet: ſpare and thin conſtitutions are ſeldom affected by it; but in all caſes heavy food is to be avoided, and whatever tends to wind or indigeſtion.

Convulſion-fits, when they are not the fore-runners or companions of other diſorders, are occaſioned by a violent agitation of the brain, affecting the whole nervous ſyſtem.

But the occaſion of convulſions in infants is to be found in a great variety of other cauſes more evident to our ſenſes and familiar to our underſtandings. The appearance of convulſion-fits is in diſtortion of features, ſtartings, twitchings, and contractions, attended with blackneſs about the mouth and eyes, and not uncommonly a cough, vomitings and purging, and almoſt conſtant ſleepineſs between the fits.

The approach of acute and epidemic diſeaſes in children is frequently diſcovered by attacks of this ſort, before the appearance of the eruptions. In the ſmall-pox, meaſles, and other diſorders of the ſame kind, convulſion-fits are uſual ſymptoms; at the ſeaſon of breeding teeth, children are peculiarly liable to them, and they are frequently produced from irritation of the nervous ſyſtem, by acrid humours in the ſtomach or bowels, worms, twitching and gnawing the inteſtines, and violent pains of any kind, whether proceeding from diſorder or any external injury.

Hence it will be clear, that the cauſe being removed, the convulſions will be at an end: as ſoon as the ſmall-pox or meaſles appear on the ſkin, the fits, however violent before, ceaſe immediately; in caſes which proceed from acidities, the correction of the indiſpoſition in the bowels and ſtomach will put a ſtop to the convulſions, and the mixture of magneſia and rhubarb, omitting one half the former, and adding the like quantity of powder of prepared crabs-eyes, will more effectually anſwer that purpoſe than any other medicine.

When the fits are occaſioned by teeth, bleeding is required, and even ſmall bliſters to be kept open; coſtiveneſs ſhould be prevented by manna, or other cooling phyſic, and the common clyſters, if neceſſary, with a few drops of laudanum. A ſmall quantity, not exceeding three or four drops, of the tincture of caſtor, may alſo be given in a tea-ſpoonful of pennyroyal-water, and repeated more or leſs often, according to the frequency of the fits.

It may be proper to remark, that when the convulſion is diſcovered to ariſe from any external cauſe, the removal of that cauſe is firſt neceſſary. Inſtances have happened, where pins thruſt into the child's body, a leg, foot, or arm forced into an unnatural poſture, or even the ſlip of a knot in tying their cloaths, occaſioning unuſual ſtricture, have produced theſe fits; and, perhaps, if examination was more frequently made into the ſituation of the child's body, a diſeaſe ſo dreadful in appearances, and in conſequences ſo commonly fatal, might ſometimes be prevented, and very often removed, without the aſſiſtance of art, or the interpoſition of medicine.

During the continuance of the fit all operations and applications are vain, and ſerve only to add to the torments of the unhappy little ſufferer, without the ſmalleſt hope of affording him relief. Patience, and the mild and gentle treatment which we have recommended, will always produce a temporary, and in moſt caſes an effectual cure. Shaking the child to rouze it, and the application of ſpirits or eſſences to the noſtrils, temples, &c. have very often dangerous effects. Let the child be kept perfectly quiet, and the uſe of opening and correcting medicines be continued between the fits, and they will be ſoon found to return leſs frequently, and with abated violence; till the cauſe being totally removed, and the contents of the ſtomach and bowels reduced to a natural ſtate, the diſeaſe, with all the dreadful ſymptoms, will diſappear, and the return may be in a great meaſure prevented by a proper attention to regimen and evacuations.

Where no medicine is at hand, the body may be opened by a tea-ſpoonful of the juice of pellitory of the wall repeated in ſix or eight hours till it has effect, and poultices of the peony root, ſcraped or beaten in a mortar, may be applied to the feet; but though theſe ſimple preſcriptions may, in caſes of neceſſity, afford help till the correcting medicine can be had, the latter is always to be preferred when it can be procured; for it is obvious to common reaſon and obſervation, that convulſion-fits in children almoſt conſtantly originate in complaints of the ſtomach and bowels; and therefore, to attack the diſeaſe in it's firſt ſeat, is to enſure the faireſt proſpect of ſucceſs.

We cannot diſmiſs this article, without again urging our readers, not to conſider convulſion-fits in children as an habitual diſorder, but to ſeek for the cauſe of them in the firſt appearance; that diſcovered, the cure will be eaſy: but to load the ſtomachs of infants with muſk, aſafœtida, caſtor, and other medicines of the ſame tribe, uſually preſcribed in theſe caſes, is to weaken and diſtreſs the patient without forwarding the cure; and to expect ſalutary effects from the efforts of art, without conſulting the operations of nature; which in all the diſeaſes of infants, but more eſpecially in this of which we are now treating, are the objects of our firſt and chiefeſt attention.

The *hooping-cough*, or *chin-cough*, is a diſeaſe almoſt peculiar to children, though inſtances ſometimes occur of ſevere attacks of it on grown perſons; it is certainly contagious, though perhaps the opinion that it ariſes in all caſes from infection, may admit of doubt.

The ſeat of this diſorder is in the paſſages which convey air into the lungs, and in the lungs themſelves; where a quantity of thick phlegm lodges, and irritating the parts to endeavour at throwing it off, occaſions coughing to ſuch a degree of violence in children, as even to bring on convulſions.

The food of new-born infants, or indeed until they are five or ſix months old, will admit of very little alteration. When the hooping-cough attacks thoſe who are weaned, great care ſhould be taken ſo to regulate their diet, as not to admit the uſe of any thing that may encreaſe the load of phlegm: butter, in particular, ſhould be avoided; bran tea, or weak whey made with any acid, and ſweetened with honey, may be the common drink; or, indeed, tea made from any of the pectoral herbs, ſuch as pennyroyal, hyſſop, or the leaves and roots of the common mallow.

Where the diſorder proceeds with great violence, bleeding is ſometimes recommended; but it ſhould only be uſed when there is a conſiderable degree of fever: vomiting I have ever found a much more effectual remedy; and the moſt eaſy way of promoting it, is to diſſolve one grain of emetic tartar in two ounces of water, and to adminiſter a tea-ſpoonful at a time at the diſtance of half an hour, till it procures a diſcharge. By the uſe of this medicine alone, the hooping-cough is frequently carried off, proper care being taken to keep the body open by magneſia and rhubarb, or manna diſſolved in ſenna tea, of which a tea-ſpoonful may be given as often as neceſſary. And, indeed, common reaſon will inform us, that in a diſorder which proceeds from obſtructed paſſages, the only method of cure is to clear them as expeditiouſly as poſſible; a work much more likely to be accompliſhed by the uſe of vomits, than by oils and balſams, which, if they ever have any good effect, are ſo ſlow in their operations, that the patient runs no ſmall riſque of being worn out by the diſeaſe, before a fair trial can be made of their efficacy. Medicines of this kind, which muſt proceed to diſperſe the phlegm, will always be uncertain in their effects; but thoſe that tend to an immediate removal of this obſtruction, ſtrike at once at the root, and overcome the diſorder, whilſt the patient has ſtrength enough to ſupport the ſtruggle.

Wood-lice, or millepedes, have alſo been recommended; an infuſion of which, dried and powdered, may be made in white-wine and water, as follows.

Millepedes, one ounce—wine, a quarter of a pint—water, a quarter of a pint.

Let it ſtand about twelve hours, pour it off quite bright, and give about two tea-ſpoonfuls twice or thrice in twenty-four hours.

If the coughing fits are extremely ſevere, the above decoction may be ſweetened with a tea-ſpoonful of the ſyrup of poppies, or may have the addition of ſix drops of laudanum for a very young child, and eight or ten for one more advanced.

When they are leſs frequent and violent, but the diſorder has been of long continuance, from ſix to eighteen grains of the bark, according to age and ſtrength, may be given in a table-ſpoonful of pennyroyal, or ſome ſimple water, ſweetened with honey: ſome add two or three grains of caſtor, and adviſe bliſtering, and bathing the feet in warm water; both which may be tried in obſtinate and dangerous caſes.

Much confidence has been placed in change of air; it is a preſcription generally very agreeable, and therefore the more readily adopted: and where the remove is from a confined or low ſituation, to a free air and elevated ground, the change will, no doubt produce very favourable effects, more eſpecially if the diſorder is in any degree epidemic, and the air we eſcape from charged with infection; but where the patient's ordinary habitation is well ſituated, and circumſtanced, where it is neither in town or village, or contiguous to other dwelling-houſes, and where no ſuſpicion of infected air or ſurrounding contagion can be entertained, the advice to remove ſeems rather dictated by an inclination to comply with old rules, than by an expectation of benefit to the ſick.

Not that we would be underſtood to inſinuate, that change of air is at all times uſeleſs; many occaſions offer in which it is eſſentially neceſſary; and the peculiar qualities which impregnate the air of particular ſituations, ſuch as the vicinity of the ſea, Bath, &c. may be in a variety of caſes of conſiderable advantage: we only mean to hint, that in the hooping-cough no expreſs reliance ought to be placed on the mere change of air, unaccompanied with attention to other regulations and preſcriptions; though when the alteration can be made for a better, it may certainly conduce to recovery.

The *rickets* is a diſeaſe which generally commences about the time that children firſt begin to walk, or are expected to do ſo. It is ſaid to have made it's firſt appearance in the weſtern manufacturing counties, and to have been occaſioned by the introduction of ſuch manufactures as confined the labourers in them to a ſedentary and inactive life; but as this diſorder is now prevalent in all parts of theſe kingdoms, it has more probably been produced and extended by the change of diet and increaſe of luxury, which has taken place in the laſt and preſent centuries.

But however it originated, idleneſs, ſloth, and confinement, are no doubt great promoters of this diſorder, which may poſſibly be in ſome caſes derived from the parents, but more frequently ariſes from cauſes ſubſequent to the birth.

Such parents as have in their infancy been afflicted with this diſeaſe; ſuch as are of a cold or relaxed habit, and have indulged in an idle and ſedentary life; or thoſe who have been accuſtomed to a ſlender and waſhy diet; will neither produce children with the ſeeds or ground-work of good conſtitutions, nor even with ſtrength enough to ſtruggle with the infirmities which they inherit from their parents. Nothing is more certain, than that though the diſeaſes of the parents may not always be conveyed to their progeny in the ſame forms wherein they appear on themſelves, yet the offſpring of thoſe who have laboured under tedious and waſting diſorders, of the conſumptive or dropſical kind, or thoſe who are tainted with venereal poiſon, nay, even the children of old age, will generally be ſubject to the rickets; which is in fact a complication of the diſeaſes we have enumerated, and exhibits at times ſymptoms of each; and it will be found, almoſt without exception, that ſtrong and healthy children are not to be met with among the immediate deſcendants from age, ſickneſs, or debility.

But circumſtances attending the ſtate and progreſs of infancy, are the more common cauſes of this diſeaſe. Damp air, wet linen, want of attention to the evacuations, a diet over high and rich, or too meagre and ſcanty, ſalt and hard proviſions, high ſpices, many ſweet things, and ſtrong liquors of any kind either ſwallowed by the nurſe or the infant itſelf, and improperly warm and ſtimulating medicines, will generally produce the rickets; which may alſo be acquired by ſuffering the infant to remain in a ſtate of inactivity, or by giving it any violent or unnatural exerciſe.

Acute diſeaſes, ſuch as the ſmall-pox and violent fevers, are very commonly followed by this diſorder; which ſeems, in all caſes, to ſeize on thoſe helpleſs victims who have been reduced to any degree of weakneſs, either by accident or diſtemper.

The beſt preventive courſe that can poſſibly be preſcribed, is moderate exerciſe in good air, frequent waſhing, and extreme cleanlineſs in the ſkin and in the cloathing, rubbing the back and limbs of the child with the hand whenever it is undreſſed, frequent change of poſture, and great regard to it's little wants and cravings; for it will often be found that vexation, and a habit of crying, will contribute to increaſe, if it does not occaſion this diſorder.

The ſigns by which the rickets are to be diſcovered, are a total diſinclination to every kind of exerciſe, and even the common motion of the body; a large head, a ſwelled and hard belly, looſe ſpongy fleſh, inability to ſtand, occaſioned by weakneſs and pains in all the joints, and emaciation or waſting of the fleſh: in the progreſs of the diſeaſe, the bones ſwell at the joints, and thoſe of the back, ſhoulders, arms, legs, and thighs, change their figures and grow crooked and deformed; the forehead ſwells out and overhangs, the cutting of the teeth is ſtopped, and thoſe which already appear become looſe, and fall out with rottenneſs; the breaſt riſes high and contracts in breadth, and the belly and adjacent parts ſeem tight and ſtretched. Yet, with all theſe appearances of actual diſeaſe, the patient preſerves an extraordinary clearneſs and ſharpneſs of apprehenſion, and even ſeems to poſſeſs a degree of ripened underſtanding; till the loſs of appetite, difficulty of breathing, or lying on one ſide, a cough and fever, are ſucceeded by a drooping, low, and irregular pulſe, which is the laſt ſtage of this melancholy and too often fatal diſorder.

But there are a variety of circumſtances attending this diſeaſe, which cannot be brought within this general deſcription, and yet will be obvious to a careful and intereſted obſerver, and are of material conſequence in effecting a cure: ſuch as the age at which it firſt appears; which of the above ſymptoms are firſt diſcoverable; whether the bones only thicken in bulk, or project in irregular forms; which ſide is moſt affected in lying down; and, in particular, whether there is any appearance of water in the head or on the lungs.

The firſt ſtep towards removing this diſorder, is to aſſiſt nature in the reſumption of her offices, by ſuch a regimen as ſeems beſt calculated to reſtore her weakened powers; and enable the patient to acquire ſuch a degree of ſtrength as to reſiſt the progreſs of the diſeaſe, and receive ſuch medicines as are adapted to promote and accelerate the cure.

For theſe purpoſes, the food ſhould be nouriſhing, yet light and eaſy of digeſtion. If the child has been accuſtomed to eat fleſh, it ſhould be indulged in the uſe of it once a day, but it ſhould conſiſt of white meats and poultry only; all kinds of ſhell-fiſh may alſo be allowed at dinner: the ſupper ſhould be biſcuit and raiſins, or other dry fruits; and the breakfaſt, water-gruel with ſugar and currants, milk chocolate, or panada. Let the common drink be Port-wine and water, in the proportion of one-third wine, and two water; but if that ſhould be inconvenient, the uſe of a ſmall quantity of ſoft and fine malt liquor may be permitted. In younger children, the uſual ſpoon-meats, rice-puddings, and bread-puddings, with a little wine and ſugar, will conſtitute a wholeſome and proper diet.

To this regulation of the patient's food muſt be added, good air, and gentle but often repeated exerciſe; great attention to ſupply the body with cloathing ſuited to the viciſſitudes of heat and cold; and if the child has loſt, either partially or wholly, the uſe of any of it's limbs, frequent chafing and rubbing the part with a warm flannel, or the hand, will contribute to the freedom of circulation, and to the diſpelling of unnatural obſtructions.

Modern practice, founded on reaſon, and juſtified by experience, has taught us to reject the long roll of receipts and preſcriptions which ſwelled the books of thoſe who wrote on this ſubject in the laſt century. To keep the body reaſonably open; to guard againſt indiſpoſition of the bowels and ſtomach, by the uſe of magneſia, rhubarb, and if from ſickneſs or loathing they ſhould appear needful, gentle vomits; and to encourage the patient in habits of chearfulneſs and content, by promoting every diverſion and amuſement which may excite him to uſe exerciſe proportioned to his ſtrength; have been long diſcovered to be the moſt efficacious remedies that can be applied to remove a diſeaſe which originates, for the moſt part, in weakneſs, and gives way on every ſide to returning ſtrength.

Above all things, the uſe of ſea-bathing, or the cold-bath, may be relied on, and ſcarce ever fails to produce happy effects; but as a weak and ſhattered frame will hardly in the firſt inſtance ſupport the ſhock of being plunged over head and ears in the water at once, the proceſs may be begun by waſhing from a baſon or other veſſel, firſt wetting the top of the head and the wriſts, and then going on to waſh the whole body. This ſhould always be done in the morning, and the patient ſhould be wiped dry and gently rubbed, till a pleaſing glow of heat extends itſelf over the whole ſurface of the ſkin.

Being thus uſed to the water, the child will ſoon acquire a liking to it, and bathing in the common way will of courſe ceaſe to be terrifying or alarming. By the conſtant uſe of waſhing, we have known children of little more than a year old ſhew the higheſt marks of pleaſure at the ſight of their uſual bathing-veſſel, and ſubmit to the operation, not only with chearfulneſs, but with every token of ſatisfaction.

But though we agree with the practice of the preſent day, to conſider the adminiſtration of large quantities of medicine as rather injurious than beneficial; yet we cannot but admit, that caſes and circumſtances ſometimes preſent themſelves, where it would be equally abſurd and dangerous to refuſe the interpoſition of medical aſſiſtance: for ſuch emergencies, we ſhall ſubjoin approved preſcriptions; with this obſervation, that in moſt caſes regimen is preferable to phyſic, and that where the latter is abſolutely neceſſary, it ſhould be given with a cautious and ſparing hand, and neither repeated oftener, nor continued longer, than the exigency of the particular circumſtance requires.

When the child is remarkably coſtive, and the excrements hard, and only voided with griping and pain, the following clyſter may be adminiſtered.

From a quarter to half a pint of water, in which half an ounce of the root, or half a ſmall handful of the leaves and flowers of marſh-mallows have been boiled a quarter of an hour—powdered anniſeeds from ſix to ten grains—coarſe moiſt ſugar, from one to two ounces—ſweet oil, half a table-ſpoonful.

This clyſter muſt be given moderately warm, and the quantity muſt be proportioned to the age of the ſubject; one half the above being ſufficient for an infant of ſix months, and a larger quantity neceſſary for thoſe of a more advanced age.

If ſickneſs, loathing, or indigeſtion, ſhould render the uſe of an emetic neceſſary, great care muſt be taken that it be extremely gentle in it's operation; and the beforementioned mixture of emetic tartar and common water, or a few grains of powder of ipecacuanha in any pleaſant liquid, ſeem beſt calculated to throw up the offenſive matter, without occaſioning any violent ſtrain or emotion, which in every ſtage of this diſtemper ſhould be carefully avoided: nor ſhould the uſe of vomits be permitted at all, unleſs there is an apparent diſpoſition to diſcharge the ſtomach in that way; nor in any caſe where they may riſque the loſs of blood from the noſe, or otherwiſe; from which conſequences may be apprehended, not to be counterbalanced by the beſt effects of the vomit.

If the child is of a groſs habit, and purgatives are required more immediate in their operation than the magneſia and rhubarb mixture, the following may anſwer the purpoſe.

> Of fine manna, from four to ſix drams—cream of tartar, from five to ſeven grains—ſimple cinnamon-water, from one ounce to an ounce and a half.

The ſmalleſt quantity for a child of ſix months old, and ſo in proportion, to be given in the morning faſting.

> Or, of lenitive electuary, from one dram to two—ſyrup of roſes, from one dram to two and a half—weak ſenna tea, from one ounce to one ounce and a half.

To be adminiſtered in the ſame proportions as the former, and early in the morning.

Diet drinks are alſo recommended, for which the preſcriptions are various: that which follows ſeems well calculated to ſweeten the blood, and ſtrengthen the ſtomach, the purpoſes for which theſe draughts are for the moſt part intended.

> The herbs maidenhair, liverwort, agrimony, and water-trefoil, of each a handful—horſe-radiſh root ſcraped, ſix ounces—great water-dock root ſliced, twelve ounces—lemon-peel, one ounce—raiſins ſtoned, one pound.

Boil theſe ingredients half an hour in four gallons of water, pour it off fine, and give a tea-cupful, or in infancy a ſmaller quantity, at leaſt three or four times a day, adding a tea-ſpoonful or two of raiſin-wine.

Having thus given a few forms for medicines where this diſeaſe refuſes to yield to the gentle treatment offered in the foregoing pages, it muſt remain for the friends, nurſes, and attendants of the ſick, to judge of the proper time for the adminiſtering of them, which ſhould in all caſes be directed by the ſituation of the patient, and the ſymptoms and circumſtances as they ariſe. But a general caution may be admitted, not to be too forward in pouring phyſick into the ſtomach, but to attend with patience to the effect of regimen and management; a perſeverance in which, will in almoſt every caſe at length make a favourable and happy impreſſion.

Of the various diſorders to which infants are peculiarly liable, at leaſt two parts in three originate in the pain and difficulty of *cutting teeth*; nor will this appear in the ſmalleſt degree ſurprizing, when we conſider the ſtructure of theſe uſeful and delicate inſtruments.

The extremities of the roots, the whole gum, and the thin internal membrane or ſkin which covers the teeth in their hidden ſtate, are furniſhed with various branches of the nervous ſyſtem, ſo that in their enlargement, projection, and forcing through the gum, theſe nice and ſuſceptible organs are irritated, torn aſunder, and ſeparated; and the general continuation of the nerves from the brain through every part of the human frame, will ſufficiently account for the aſſertion in the preceding paragraph.

Hence follow reſtleſſneſs, watching, fevers, coſtiveneſs, diarrhœa, and even convulſions; and hence proceed indigeſtion, acidities, wind, griping, nauſeous ſtools, vomitings, loathings, and the whole train of complaints in the ſtomach and bowels; which in many, if not moſt caſes, are but ſymptoms of this painful and dangerous operation.

It is impoſſible to be preciſe in deſcribing the time of cutting teeth, which depends chiefly on conſtitution: healthy and robuſt children will breed their teeth early, and with comparative eaſe; whilſt thoſe of ſickly or delicate habits, will labour under an increaſed ſeverity of pain, at a more advanced age.

But from ſix to twelve months is the ordinary ſeaſon of teething: ſome inſtances occur where the ſymptoms appear even at an earlier period, and ſome where no ſigns of approaching teeth are exhibited till fifteen, ſixteen, or even eighteen months; but as theſe caſes are much leſs frequent, ſo the firſt-mentioned age is to be conſidered as the uſual and proper time.

The ordinary appearance of the ſymptoms of this painful effort of nature is in heat, reſtleſſneſs, itching of the noſe and lips, ſtartings, twitchings, inflamed eyes, and a continual driveling; theſe are followed by ſickneſs, loathing, griping, wind, and either a violent looſeneſs, or the contrary, and frequently terminate in fever, convulſions, and death.

The firſt object of our attention ſhould be to prevent, if poſſible, the appearance of any of thoſe ſymptoms in any dangerous degree; the next to remove them, if they have already appeared, as expeditiouſly as ſafety will admit.

If the child is at the breaſt, the diet of the mother will be of material conſequence to the infant, and proper regulations on this head will be found in the foregoing chapter. But if it is already weaned, and has been accuſtomed to taſte animal food, precaution is at this time neceſſary in the uſe of it; and light broths, chicken or beef-tea, and palatable ſlops, are to be preferred to fleſh meals of any ſort.

Diluting liquors ſhould be plentifully adminiſtered: ſcarce any can be found more wholſome than ſweet milk and water, though baulm-tea and other herb teas are by ſome held in higher eſteem.

But eſpecial care ſhould be taken, that neither the food or drink of the child be given too warm: the extreme tenderneſs of the whole mouth and gums will not admit of the additional pain which neglect in attending to this regulation muſt infallibly occaſion.

From ſix months we may begin to expect the approach of teeth, and after this time more particular care is requiſite to promote proper evacuation, and leſſen any extraordinary degree of it. The body may be kept cool and open by doſes, repeated as often as they are neceſſary, of the magneſia and rhubarb; and in caſe of obſtinate coſtiveneſs, clyſters ſhould be adminiſtered till the ſtools become natural, and reaſonably frequent; ſhould the child, on the contrary, be ſeized with violent looſeneſs, the magneſia may be exchanged for prepared crabs-eyes, or even common chalk, in the ſame quantity.

Of all the miſtakes into which ignorance has betrayed the attendants on infants, ſcarce any has been more prejudicial than the almoſt univerſal cuſtom of rubbing their gums with hard ſubſtances, or permitting them to carry corals, glaſs, or other impenetrable weapons for that purpoſe. As the progreſs of the teeth excites heat and itching, the child is diſpoſed to apply whatever comes within it's reach to allay theſe diſagreeable ſenſations; it ſhould therefore be furniſhed with the means of procuring preſent eaſe, without obtaining it at the expence of future injury: whatever will eaſily receive an impreſſion, without breaking or crumbling, is the fitteſt for this purpoſe, and perhaps ſcarce any thing better can be found than a cruſt of ſtale bread, or a ſtick of freſh liquorice, which may be frequently offered to it, or put into it's hand.

The pernicious and dangerous conſequences of permitting the uſe of harder ſubſtances, will immediately appear on inſpecting the form of an infant's tooth. Nature has provided the edge or upper part of it with the figure and appearance of a ſaw, thereby qualifying it to force it's way without obſtructing the circulation of the blood in the particular part on which it preſſes; and which muſt unavoidably be the caſe, but for this wiſe and ſalutary proviſion. The force of applying hard inſtruments will unqueſtionably produce the double miſchief, of ſtopping thoſe channels of circulation, and deſtroying the fine and delicate edge ſo eſſentially neceſſary in cutting it's way through the gum.

But the evil does not ſtop here: the ſkin on the ſurface of the gum, by perpetual rubbing and preſſure, becomes thick, hard, and in a certain degree callous; and reſiſting the attempts of the broken or blunted tooth, occaſions violent pains, inflammation, and other fatal conſequences.

The teeth generally preſent themſelves in the following order: firſt, the fore-teeth, the appearance of which, as well as all the others, is frequently foretold by a ſmall white circle ſurrounding that part of the gum, and deſcribing the ſize of the approaching tooth; the dog-teeth next break through; and laſt of all the grinders make up the ſet of what are called the milk-teeth, and which is generally compleated in the ſecond year. About ſeven years old children begin to ſhed theſe milk-teeth, and new ones ſucceed; and at the age of maturity, commonly about the twentieth year, thoſe which are called the *teeth of wiſdom* make their firſt appearance; but the particular ages here pointed out are not to be conſidered as the certain times of cutting teeth, which vary according to the health and vigour of the child, and depend on many different circumſtances.

The difficulties and dangers which attend cutting the teeth may be frequently obviated, and in moſt caſes conſiderably leſſened, and the diſeaſes and ſymptoms which occur in the courſe of it, may be for the moſt part removed, by attention to a few general and plain rules, applying to almoſt every caſe which offers at this critical period of the infant's exiſtence.

To keep the body open by cooling and correcting medicines, to guard againſt any violent looſeneſſes by a proper change of phyſic, to ſupply the want of immediate operation by gentle clyſters or vomits, and to regulate the food by the directions already given, are the great lines which lead to the preſervation of health and life in this moment of impending danger.

For theſe purpoſes, the rhubarb with magneſia, in caſe of coſtiveneſs, and with prepared crabs-eyes, if there is an apprehenſion of too great a degree of looſeneſs, may be adminiſtered with ſafety, and almoſt conſtant ſucceſs. The clyſters may be of the following compoſition.

> Milk and water, or thin chicken or mutton broth, from two to four ounces—common ſalt, from half a table-ſpoonful to a whole ſpoonful—coarſe ſugar, the like quantity—ſweet oil, from half a ſpoonful to a whole one.

Adapting the quantity to the age of the patient.

If emetics are required, the powder of ipecacuanha may be taken in the manner and proportions heretofore directed.

But there are caſes of emergent danger, that require different treatment. Where the efforts of nature are inſufficient to burſt the gum, and alarming ſymptoms of inflammation or convulſion begin to make their appearance, the lancet ſhould be applied, and the labouring tooth helped into the world by the tender hand of the operator, which we muſt in all caſes prefer to the cruel mangling of the nail, or the violent compreſſion of a blunt and edgeleſs inſtrument.

Bleeding is undoubtedly eſſential to the removal of a high fever, and violent inflammation; but the blood of infants ſhould be drawn with a ſparing hand: more than the quantity neceſſary for the offices of life is ſeldom found in their veſſels, and to leſſen that quantity might occaſion ſuch a degree of debility, as to render them unable to ſupport the variety of attacks made on their tender frames in the ſeaſon of breeding teeth.

Some phyſicians have been of opinion, that this operation can by no means be diſpenſed with, and have adviſed bleeding with leeches under each ear, as the groundwork of all other preſcriptions; and though we do not rate the uſe of bleeding at ſo very high a value, yet where it is to be tried, this is without doubt the beſt way of performing it, both with regard to the eaſe of the patient, and the leſs ſenſible effect it has on the powers of circulation.

Bliſtering under the ears, or between the ſhoulders, is often attended with very happy effects; perhaps, keeping open a drain of this ſort, or ſupplying it's place with an iſſue or ſeton, may be of uſe during the whole time of teething. Plaſters of Burgundy pitch are ſaid to eaſe the cough which is frequently troubleſome to ſpare and ſlender habits.

In fevers conſequential to breeding or cutting teeth, four or five drops, or more, according to the age of the patient, of ſpirits of hartſhorn, in a ſpoonful of ſimple water, has been preſcribed under authorities too reſpectable to admit of doubt: this medicine is to be repeated four, five, or ſix times, at the diſtance of four or ſix hours, according to the emergency; and the addition of two, three, four, or five drops of laudanum, is recommended with great earneſtneſs by ſome modern practitioners.

We ſhall conclude this article with mentioning a few external applications, on the efficacy of which we cannot adviſe great reliance; yet as they are in themſelves perfectly innocent, no inconvenience can attend the uſe of them.

Doſſils, or pledgets of lint or cotton, dipped in warm oil of almonds, and applied to the gums every hour or two till the tooth appears.

A decoction of the head of a poppy, in it's ripened ſtate, uſed in the ſame manner.

Pure honey rubbed very lightly on the gum with the finger, or a linen rag.

But medicine, operations, and external applications, will in moſt caſes be rendered needleſs by regimen and management; for a healthy habit and proper temperature of body are the beſt preſervatives againſt thoſe tedious, dangerous, and fatal ſymptoms, which for want of due regard to theſe eſſential articles, are too often attendant on the *breeding* and *cutting teeth*.

The next diſeaſe of which we mean to treat, and to which children are moſt liable at and after teething, is occaſioned by *worms*; which, whether they generate in the ſtomach or are conveyed into it with the aliment, both which opinions have been maintained, are productive of ſymptoms diſagreeable, loathſome, and dangerous; and when theſe troubleſome invaders are ſuffered to acquire power in ſtrength or numbers, they maintain their poſts with ſuch indefatigable induſtry, that they are with great difficulty expelled.

There are three ſorts of *worms* commonly found in the human body, which are diſtinguiſhed by the deſcriptions of the *flat worm*, the *round and long worm*, and the ſmall *white worms* uſually felt at the extremity of the gut next the fundament, which are called by the learned *aſcarides*, but have not yet obtained any deſcriptive Engliſh name.

Other worms have alſo been diſcovered in diſſection, and in the human excrement, but the difference from thoſe we have mentioned has in moſt caſes been trifling, and the effects they have produced have been ſo perfectly ſimilar, that we may ſafely confine our treatment and method of cure to thoſe which are uſually found and univerſally known.

A pale and yellow complexion, weakneſs, a hard and ſwelled belly the conſequence of a coſtive habit, wind in the ſtomach and bowels, gripings, ſour and fœtid ſtools, continual thirſt, an uncertain but frequently ravenous appetite, itching of the noſe and lips, ſlavering, offenſive breath, diſturbed ſleep, heavineſs, profuſe and cold ſweats, fainting fits, and at laſt paralytic and epileptic ſeizures, with a great variety of other complaints, which it is almoſt impoſſible to enumerate, but being always accompanied with one or other of the foregoing, may be underſtood to denote worms.

Theſe ſymptoms are alſo frequently attended by a low and irregular pulſe, ſhiverings, palpitation of the heart, a dry cough occaſioning pains in the ſide, and other feveriſh indications.

So many opinions have prevailed reſpecting the cauſes of worms, that it is extremely difficult to determine the right.

But reaſon, as well as experience, teaches us, that unripe or rotten fruits, crude, hard, and indigeſtible traſh, great quantities of raw ſallads, cheeſe, and moſt kinds of confectionary, though they may not immediately produce worms, are moſt likely to encourage their growth and increaſe; that perſons of weak habits, and whoſe employments do not admit of their uſing much exerciſe, are moſt ſubject to them; and that, if they do generate in the ſtomach or bowels, they will moſt probably abound where the inteſtines are in a diſtempered ſtate, and for that reaſon are often conſidered as ſymptoms of other diſeaſes.

But from whatever cauſe they proceed, the neceſſity of deſtroying or bringing them off, and preventing their breeding again, is obvious; the former can only be effected by a frequent and judicious uſe of purgatives, and the latter by ſuch bitters as are moſt calculated to ſtrengthen the ſtomach, and act offenſively againſt it's intruding inhabitants.

Of the former, the following preſcription has been highly and deſervedly eſteemed.

> Jalap, four grains—rhubarb powdered, five grains—calomel, from one to two grains—ſyrup of black currants, a table-ſpoonful.

This doſe is ſufficient for a child of five or ſix years old, and may be taken every fourth morning faſting, till it has been repeated ſix or eight times, taking care to keep the patient from the air, cold water, and damp linen, on the days this medicine is taken.

On the days that the above is omitted, let the child take ten grains of Æthiop's mineral, in a tea-ſpoonful of currant jelly; or rather, if it can be prevailed on to ſwallow it, in the like quantity of lenitive electuary.

As a common drink, except on the particular purging days, when warm ground-ivy, or ſpruce-beer may be ſubſtituted, we would recommend lime-water and milk, in equal quantities, or the following decoction by way of diet-drink.

> Take a handful of each of the following herbs: Purſlane, tanſy, wormwood, plantain, St. John's wort, and the leſſer centaury—orange-peel, half an ounce—gentian root ſliced, three drams—raiſins ſtoned, one pound—dried figs ſliced or bruiſed, one ounce.

To theſe ingredients, add two gallons of water, and boil the whole half an hour, or let them infuſe twelve hours in a moderate heat.

This draught may be diluted for weaker ſtomachs, or rendered palatable by the addition of a ſmall quantity of generous white wine.

Where there is any objection to calomel, the following purging potion may be ſubſtituted.

> Rhubarb in powder, two ſcruples—leaves of ſenna picked from the ſtems, one dram—ſeed of St. John's wort, half a dram—thyme and ſavory dried, of each a handful.

Infuſe and boil the above in a pint of water till it is reduced to half the quantity, wherein diſſolve—

> Of Rochelle ſalts, three drams—of fine manna, three drams.

Divide into two doſes, and give them at the diſtance of three or four days, repeating them as often as neceſſary.

But in many caſes the following courſe of Æthiop's mineral hath anſwered every purpoſe; and we have known repeated inſtances, where this diſeaſe, in a very advanced ſtate, hath been effectually removed by continuing the uſe of it for three or four weeks.

Give from ſix to ten grains of the Æthiop's mineral in raſberry jam, currant jelly, or any other pleaſant vehicle, twice in a day; the firſt early in the morning, the ſecond at night, at leaſt an hour after ſupper.

Let all medicine be omitted the next day, and the third morning let the child ſwallow a tea-cupful of ſtrong ſenna tea; if that ſhould be ineffectual to produce ſtools, let it be repeated till it occaſions two at leaſt.

The ſucceeding day adminiſter the Æthiop's mineral, reſt the ſecond, and purge off the third day as before; and proceed in the ſame way till the complaints ceaſe, and the child recovers it's health and complexion.

If this remedy proves effectual, it may be proper to repeat it in the ſpring and fall for two or three ſucceeding years.

Black hellebore, more commonly known by the name of *bear's foot*, has been alſo recommended to be taken either in a decoction of a dram of the green leaves in a quarter of a pint of water; from twelve to fifteen grains of the ſame herb dried and powdered, and given in a table-ſpoonful of ſimple water; or a ſyrup made with the green leaves and common moiſt ſugar, and given in the quantity of a tea-ſpoonful once a day.

A ſpoonful of common ſalt diſſolved in water, and taken daily, has often been attended with very good effects; to this may be added, where the ſtomach of the patient will bear it, a ſpoonful of ſweet oil.

External applications, ſuch as fomentations, embrocations, and plaſters, were formerly in much uſe; theſe were compoſed of the oils of rue, wormwood, and bitter almonds, of the gall of an ox, and of the powders of cummin-ſeed, the leſſer centaury, or aloes, which were for this purpoſe reduced into one of thoſe forms; but obſervations, made on repeated experiments, have eſtabliſhed an opinion, that little hope can be derived from the efficacy of theſe applications, which are therefore, with good reaſon, in a great meaſure laid aſide. But clyſters of fat broth, oil, and coarſe ſugar, have been found of great ſervice in bringing off the ſmall white worm from the gut or fundament, and allaying the heat and itching occaſioned by the irritating motions of thoſe very buſy tormenters. And ſulphur, taken in conſiderable quantities, in proportion to the age and conſtitution of the patient, either in any liquid, or ſyrup, or jelly of fruit, has been frequently adminiſtered with effect.

After the uſe of medicine has deſtroyed or expelled theſe very diſagreeable intruders, a two-fold care remains, to ſtrengthen the ſtomach and bowels, weakened by the various ſymptoms occaſioned by continued irritation, and to guard againſt the dangers of a return, which will moſt probably happen, if no precautions are uſed to prevent the worm from breeding again.

To anſwer both theſe purpoſes, the Peruvian bark may be almoſt certainly relied on: and we would adviſe the powder to be taken in quantity from a ſcruple to half a dram, in a glaſs of claret or port wine, at leaſt twice a day. If to this medicine the diet-drink or decoction of bitter herbs be added, either as the common drink, or in regular draughts, and the uſe of both be continued a few weeks, we have great reaſon to believe the patient's health will ſpeedily acquire a perfect re-eſtabliſhment.

We have avoided dwelling on nice diſtinctions, which have been made between different kinds of the flat-worm, one of which appearing to have a head, and to exhibit ſigns of life by various motions, has been called the *ſolium*, and is ſaid to occaſion pains in the liver, ſtomach, and back; and, as theſe ſymptoms differ in ſome meaſure from thoſe formerly mentioned, eminent writers have pointed out the diſcovery of the certain exiſtence of this ſpecies of worm by an examination of the excrement, where it is always denoted by ſeveral ſmall white bodies, in figure and ſhape like the ſeeds of melons or cucumbers, and have preſcribed various medicines, as efficacious for the deſtruction of this particular worm, and the removal of the complaints occaſioned by it, which we omit to inſert, becauſe we are ourſelves of opinion, that the treatment and remedies offered in the preceding part of this article, may be depended on in moſt diſorders which are occaſioned by worms of any denomination or deſcription.

Scrophulous ulcers have obtained the name of the *king's evil*, from pretended cures ſaid to have been effected by the royal touch, from the reign of Edward the Confeſſor, whoſe reputed piety gave credit to this ſuperſtitious practice, which was continued with ſome interruptions to the laſt reign of the Stuarts; and the efficacy of this magical operation was ſo firmly rooted in the opinions of all ranks of men, that a *form of prayer*, or what might with much propriety be ſtiled an *incantation*, to be uſed on theſe occaſions, was actually added to the liturgy of the church of England after the reformation.

Nor is this the only ſpecies of ſuperſtition that has prevailed in attempts to remove the baneful effects of this diſtemper. Seventh ſons, and perſons whoſe entrance into the world have been marked with uncommon circumſtances, have been ſuppoſed to poſſeſs the powers of healing in ſo wonderful a degree, that a diſeaſe often conſtitutional, and always obſtinate in cure, would at once yield to the virtues communicated by the ſlighteſt impreſſions of thoſe hallowed phyſicians of chance.

The fact is, that when the encreaſe of population, and the dawn of commerce, drew men together in cities and towns; and in ſome meaſure took from the inhabitants of ſuch ſocieties the neceſſity of procuring the means of exiſtence by violent exerciſe in purſuing the beaſts of the foreſt, and by daily labour in cultivating the land for bread; this diſeaſe, the child of idleneſs, and the reſult of a ſedentary life, firſt prevailed: and it's appearance being conſidered as preternatural, it is not ſurprizing that extraordinary means of cure ſhould be ſuggeſted by thoſe whoſe great care it was to improve every occaſion to promote the intereſts of the church, by ſtrengthening the hands of royalty; thoſe two powers, in combination, poſſeſſing at that time, and wiſhing to preſerve, as well the whole civil as eccleſiaſtical authority.

Nor did the clergy only add the legiſlative to the ſacred functions: poſſeſſed of all the little learning which then enlightened theſe realms, they were the only phyſicians; and though their knowledge of the medical art did not extend to the cure of this new diſtemper, yet they had ſagacity enough to diſcover, that it generally diſappeared at a certain period of life, about which time they conſtantly recommended this operation, and availed themſelves of the efforts of nature, and changes of conſtitution, to attribute the cure to the royal touch, and the effects of acts of devotion performed by themſelves.

We have claſſed the king's evil among the diſeaſes incident to childhood and youth, becauſe inſtances of it's having ſeized grown perſons ſo ſeldom occur, that whenever we diſcover any ſymptoms of it in ſuch ſubjects, we are apt to conceive that we are deceived by appearances, and led to miſtake the effects of inveterate ſcurvy, or ſome ſuch other diſorder, for that of which we are now ſpeaking.

At preſent, this diſeaſe may be ſuppoſed to originate in the conſtitutions of the parents, and to be inherited from them at the birth; or it may ariſe from natural cauſes, conſpiring with accidents, occaſioned by a deficiency in air, exerciſe, cleanlineſs or attendance, in the ſtate of infancy.

Beſides theſe cauſes, there are ſtill others from which it may probably proceed, ſuch as eruptive diſorders, outward blows, bruiſes and ſtrains, ſtrictures occaſioned by tight lacing, or even gartering, conſtant leaning on the breaſt or ſtomach, or any other unnatural poſition of thoſe particular parts of the body; to which we may add, bad air, unwholſome or improper food, and whatever tends to corruption or relaxation.

For the beſt and only means that we know, of preventing this diſeaſe, we muſt refer our readers to the chapter on *the Management of Infants*; which we earneſtly recommend to the frequent peruſal of thoſe parents who wiſh to enjoy the bleſſing of a healthy family, and to ſee the progreſs of their offſpring through the critical ſeaſons of infancy and youth, unattended with the danger and diſtreſs of repeated illneſs, and in particular, free from the ſhocking appearances, and melancholy conſequences, of this loathſome diſorder.

Children of full and florid complexions, are moſt liable to the attacks of the king's evil; the firſt ſymptoms of which are, tumors or ſwellings in the glands; and it was formerly ſuppoſed to affect the ſeat of the inteſtines, before it's external appearance, though that opinion has in ſome meaſure been exploded, by very ingenious modern anatomiſts: theſe ſwellings in the glands, ſometimes appear firſt in ſmall warty knobs, and for the moſt part, from immediately behind the ear downward to the neck; which, as they become large or numerous, conſtitute one conſiderable ſwelling, which is ſometimes fixed, and ſometimes moveable; occaſions but little pain, or inflammation; takes different ſhapes, according to the figure of the gland, and is with great difficulty brought to ſuppurate or ripen: and when that happens, and it either burſts of itſelf, or is opened with a knife or lancet, diſcharges only a thin matter, with very frequently ſtreaks of blood.

But theſe ſwellings are not confined to the glands under the ear, or in the neck alone; they are to be found, with preciſely the ſame appearances, in various other glandular parts of the human body; ſuch as the arm-pits, groins, ancles, nay, even the hands, feet, and toes. Swellings in the breaſts, and thoſe in the knees, which are uſually called *white ſwellings*, are alſo moſt probably of the ſame kind.

Nor are theſe the only ſymptoms by which this diſeaſe is diſtinguiſhed; ſwelled and cracked lips, noſe, and cheeks; ſore eyes, with a ſharp and acrid diſcharge, occaſioning rawneſs, and violent inflammation; and dry cruſts, or ſcabs on the elbows, and other joints, with a caries or rottenneſs in the bones, particularly at the heads or joints, the conſequence of the diſſolution of the marrow by this penetrating humour; are common attendants on this diſorder.

As poverty of blood, and a relaxation of the fibres, are frequently the cauſes of ſcrophulous complaints, ſo the regimen to be obſerved ſhould be calculated to ſtrengthen and correct; for this purpoſe, the food ſhould be ſufficiently nouriſhing, but light, eaſy of digeſtion, and of rather a drying quality; of animal food, white meats, poultry, and mutton boiled or roaſted, but rather the latter, are to be preferred; vegetables ſhould be but moderately uſed, and biſcuits, raiſins, dried figs, and other fruits preſerved by the ſun, without ſugar, are to be recommended; that ſort of bread, which is made with the ſmalleſt quantity of yeaſt, leaven, or other fermented matter, is the moſt adviſeable; and for common drink, any kind of well-concocted malt liquor, or white-wine and water: water alone ſhould in no caſe be admitted.

A pure air, and exerciſe, on horſeback where the ſtrength of the patient can ſupport it, will be in every caſe uſeful; indeed, all means of cure muſt prove ineffectual, if theſe eſſential articles are omitted: a diſeaſe, which in ſome inſtances actually originates in the want of exerciſe, will ſcarce ever be removed during the courſe of a ſedentary employment, or an inactive life.

The uſe of mercurials and ſtrong purges, has of late years been diſcontinued, and the place of theſe medicines has been happily ſupplied by alteratives, or ſuch preſcriptions as, without any viſible or violent operation, inſenſibly ſweeten the blood and correct the humours: in ſuch diſeaſes as the king's evil, which is ſeldom occaſioned by groſſneſs of habit, whatever does more than merely keep the body open may be conſidered as injurious.

The Peruvian bark has been very juſtly recommended as one of the beſt medicines that can be adminiſtered in this diſorder, which may be taken in quantities from ten grains to thirty in Port wine or claret, twice or thrice a day; and lime water prepared from oyſter-ſhells calcined or burnt, and mixed with a ſmall quantity of Port or Madeira wine, may be uſed as the common drink.

If the bark in ſubſtance cannot be conveniently given, two ounces of the powder may be boiled in two quarts of water, till one half the quantity is reduced; to this may be added, when the boiling is nearly finiſhed, one ounce of ſliced liquorice-root, and the like quantity of ſarſaparilla, with as many ſtoned raiſins and dried figs bruiſed, as will ſerve to render it agreeable to the palate: of this decoction, from two to four ounces, according to age, may be given at leaſt twice a day.

As we by no means approve of a multiplicity of medicines, the following powder and diet-drink are only mentioned as the approved preſcriptions of phyſicians whoſe practice and writings have been very deſervedly held in the higheſt eſtimation.

Steel prepared with ſulphur, three drams—rhubarb powdered, three drams—Winter's bark, one ounce—ſalt of wormwood, half an ounce—fineſt ſugar, two ounces.

Mix them in a mortar to a fine powder, and give the weight of a dram once in twenty-four hours.

For the diet-drink take—

Lime water prepared from oyſter-ſhells calcined or burnt, three pounds—ſarſaparilla cut and bruiſed, one ounce—China root, half an ounce—Saſſafras wood, three drams—liquorice-root ſliced, half an ounce—raiſins of the ſun ſtoned and bruiſed, four ounces.

Infuſe twenty-four hours in a gentle heat, and ſtrain it off for uſe.

This may be taken in the quantity of a ſmall tea-cupful, twice a day; in the morning faſting, and in the afternoon, at leaſt an hour after and before eating.

The extract or juice of hemlock hath alſo been adviſed; but as taking it in any conſiderable quantity is frequently attended with ſome degree of danger, eſpecially to children, we would rather wiſh to confine the uſe of this herb to external applications, in the form of cataplaſm or plaſter, to old and cancerous ulcers; where it hath frequently produced very ſenſible alterations for the better, though we cannot from our own knowledge ſpeak of any inſtance in which it hath effected a compleat cure.

The herb vervain is not without it's advocates, and is ſaid to have been very efficaciouſly uſed in this diſeaſe. The wounds occaſioned by ſcrophulous tumours are directed to be waſhed with a diſtilled water or infuſion of the leaves, mixed with equal parts of Port wine and vinegar, and to be dreſſed with an ointment made alſo from the green leaves and hog's lard: nay, ſome go ſo far as to aſcribe extraordinary virtues to the freſh root ſuſpended by a ribband, ſo as to reach the pit of the ſtomach, next the ſkin, and renewed as it grows dry.

But of all the remedies that have ever been offered for the removal of this tedious and painful diſeaſe, we are inclined to believe none has ever been found more effectual than bathing in the ſea; to which if we add the internal uſe of the ſea-water in ſuch quantities only as will ſerve to keep the body open; and if the ſores or ulcers are carefully waſhed with the ſame water, or rather with the froth which riſes on every wave as it beats on the ſhore, and attention be paid to the other regulations of exerciſe and diet; higher expectations may be formed of obtaining a cure, than from the almoſt voluminous preſcriptions and receipts, which not only fill the works of the learned, but are handed down in moſt families, as approved ſpecifics for a diſorder which has hardly ever been eradicated by the help of any one of them.

Nor do we apprehend ſuch reſtrictions and precautions as have been laid down by modern writers, with reſpect to the external and internal uſe of ſea-water, are abſolutely neceſſary to be obſerved. We have known many inſtances where the courſe of it has been continued through the ſevereſt ſeaſons of the year, with manifeſt advantage to the patient; but we do not remember a ſingle one, where it has proved in the ſmalleſt degree prejudicial.

A tumour once formed, all attempts to reduce or diſperſe it will in general prove ineffectual; ſome little additional warmth of flannel, or other ſoft woollen cloth, may be neceſſary to promote ſuppuration or ripening; and where the tumour hath been opened, or the matter contained in it has burſt the ſkin of itſelf, and a conſiderable diſcharge continues, cleanlineſs and common digeſtive ſalves, or ointments, will prevent the wound from being troubleſome, though in ſome inſtances it may be neceſſary to dilate or enlarge the lips of it, which may be done by gently thruſting in a doſſil of lint rolled hard and dipped in the ointment with which the wound is dreſſed: and not unfrequently fungous, or what is commonly called *proud fleſh*, will make it's appearance, which may be removed by mixing a ſmall proportion of red precipitate powder with yellow baſilicon, and applying it on cotton or lint. The uſe of cauſtics, or the knife, to extirpate or deſtroy the gland, and other chirurgical operations, are of a nature much too critical to be diſcuſſed in a work which is intended for general uſe, and ought to contain no rules for practice which cannot be made familiar to every underſtanding.

Nor do we conceive that theſe violent means will be often neceſſary, if the patient conforms ſtrictly to the foregoing regimen and gentle treatment, and waits with patience the effect it will in due time certainly produce. Many inſtances might be given of fatal conſequences attending the too haſty proceſſes of inciſions and cauteries; but it would be an invidious and uſeleſs taſk to point them out.

The *hydrocephalus*, or *dropſy in the head*, is of two kinds; one of which is external, when the water is ſeated between the ſkin and the ſkull; the other is internal, when the water gathers within the ſkull, and immediately upon the brain.

This melancholy and almoſt hopeleſs diſeaſe, which ſeldom ſhews itſelf but in the ſtate of childhood, is often occaſioned by blows and bruiſes received in the frequent falls which infants are liable to; and may ſerve as a leſſon againſt that fatal indifference with which they are too often intruſted to the care of thoſe who are unable, or from indolence or inattention, unwilling to watch their tottering ſteps, and guard them againſt the dreadful conſequences of ſuch external injuries: for though this diſeaſe may in ſome inſtances be attributed to other cauſes; ſuch as weakneſs, or relaxation; a natural diſpoſition in the brain to ſeparate and produce a larger quantity of that whey-like matter, which is called the ſerum of the blood; or from a defect or deficiency in the ſecretion or ſeparation of the urine from the alimentary fluids; yet we think ourſelves fully juſtified in aſſerting, that it much more commonly ariſes from acts of careleſſneſs, and diſregard to the accidents above deſcribed.

The general ſymptoms of the dropſy in the head, are pains in the neck, ſhoulders, extremities, and ſometimes, though not often, in the arms; uneaſineſs in the head and ſtomach, and many other complaints ſo very ſimilar to thoſe of diſorders occaſioned by worms, that it is frequently difficult to diſtinguiſh it. As the diſeaſe gains ground, the ſymptoms become more alarming; a violent pain in the fore part of the head, and extending from one temple to the other, ſickneſs of the ſtomach, drowſineſs and wearineſs, are ſucceeded by an irregular and languid pulſe, extreme difficulty of breathing, violent heat, and other ſymptoms of fever; and, in the laſt ſtages, the light, and every motion, become diſagreeable, and a quick pulſe, a certain degree of delirium, and either a lethargic inſenſibility, or convulſion, compleats the ſad cataſtrophe.

The cure of this diſeaſe, in any ſtage of it, is extremely doubtful: the reſemblance it bears to worm caſes, has induced many perſons to adminiſter the remedies preſcribed in thoſe diſorders; and as there is a poſſibility of miſtake, and theſe medicines cannot be productive of injury, a trial of them may be extremely proper.

Others have recommended following the treatment of the common dropſy, both as to regimen and phyſic; and to promote a diſcharge from the noſe, by ſnuffing up powder of white hellebore and other ſtimulatives; but we are apprehenſive it will in moſt caſes be extremely difficult to reach the ſeat of this diſorder. All attempts to diſcharge the water, by opening theſe tumours, will occaſion almoſt inſtant death.

The *ſcabbed head*, is the moſt offenſive and loathſome diſeaſe to which children are liable, and is occaſioned for the moſt part by want of cleanlineſs, and by unwholſome and improper food.

The firſt appearance of this diſorder is in pimples or hard lumps, the heads of which burſting, a thin acrid humour iſſues, which ſoon creates a ſcurf or cruſt over the ſurface, whilſt the ſharp matter beneath eats and corrodes, forming at length one continued ſore over the whole head.

Iſſues and ſetons have been recommended, and are doubtleſs of utility in very obſtinate caſes; but the progreſs of the diſeaſe may generally be prevented, and the cure effected, by keeping the head perfectly clean with a waſh of Caſtile ſoap and warm water, giving at the ſame time the Æthiop's mineral, and ſenna tea at intervals, as [illegible]ſed in diſorders occaſioned by worms, and by a ſlight regulation of the diet.

Some adviſe ſmall doſes of calomel to act as an alterative only, and the antimonial wine in ſuch quantities as the ſtomach will bear: if theſe are adminiſtered, a grain of the former, or from five drops to a dram of the latter, may conſtitute the doſe; but the more ſimple method of treatment will in moſt caſes prevail without the interpoſition of mercurials, which often give a ſudden check to this eruption, and may be attended with very ſerious conſequences.

Why *chilblains* ſhould be conſidered as one of the moſt obſtinate kind of eruptions incident to children, or why this diſorder ſhould be claſſed among the eruptive diſeaſes, any more than whitlows, boils, or any other ſpecies of external impoſthume, we confeſs ourſelves at a loſs to diſcover. We have been led from our obſervations to deſcribe the chilblain as an abſceſs occaſioned by partial inflammation, excited by the particular part being expoſed to an extraordinary degree of cold, wet, or damp, for a conſiderable time, and then being too ſuddenly heated by violent exerciſe, or approaching too near the fire.

The appearance of chilblains is ſo univerſally known, that it will be wholly unneceſſary to offer any account of the ſymptoms; nor does the method of cure require any very extraordinary degree of attention: if the inflammation is conſiderable, it cannot be wrong to take opening phyſic, and to keep the part reaſonably warm; but we do not altogether approve of bathing the part with brandy or other ſpirits; on the contrary, we recommend fomentations of warm water and bran, the liquor in which turnips have been boiled, or any other of the like emollient quality. If the diſorder has proceeded ſo far as to occaſion actual wounds or ſores, they may be dreſſed with plaſters of the common ointment of bees-wax, mutton fat and oil, or Turner's cerate; and we apprehend theſe methods of treatment will either prevent their being highly troubleſome, or ſpeedily remove the complaints when they are already become ſo.

Having now gone through the liſt of diſeaſes to which infants and children are more peculiarly liable, we ſhall diſmiſs this chapter with repeating ſome few obſervations, which however frequently they may have occurred in the foregoing pages, cannot be too ſtrongly inculcated: obſervations ariſing from the application of plain reaſon to common experience; which, joined together, will always be found ſure guides to ſafety and ſucceſs in the ordinary management of diſeaſes, and the needful practice of phyſic. And we deſire our readers will in all caſes examine by theſe lights, the regulations and preſcriptions laid down and intended in the courſe of this work; becauſe, where they are found conſonant to theſe excellent directors, they will be ſubmitted to with chearfulneſs, and followed with confidence: and we do not entertain a wiſh, that a ſingle individual ſhould adopt our ideas, without being thoroughly convinced that they are founded on thoſe principles by which we expect to be judged.

The firſt obſervation which occurs is, that in moſt diſeaſes nature points out to us the obvious method of cure; that we ſhould, therefore, on every occaſion, exert our faculties to diſcover which way the efforts of nature tend; leſt failing to co-operate with her, we ſhould counteract her deſigns, and all our endeavours be not only rendered uſeleſs, but injurious.

Our next care ſhould be to ſuſpend the uſe of medicine, at leaſt in any conſiderable quantity, as long as it can poſſibly be avoided without incurring actual danger: in acute diſeaſes, critical circumſtances frequently afford relief in a way that phyſic might in many inſtances obſtruct; and it behoves us to wait for thoſe appearances with patience and attention, when we may with certainty interpoſe the aſſiſtance of art, without the danger of miſtake, or the hazard of miſapplication.

In diſorders of ſlower progreſs, another reaſon preſents itſelf for delaying the preſcriptions of phyſic: regimen will in very many caſes effectually anſwer all our purpoſes, and when this happens, the diſeaſe will be much more effectally eradicated than by the operations of medicine; becauſe, in the one inſtance, the cure is effected by a thorough change in the conſtitution and habit of body; in the other, the malady may only have retreated from the vigorous attacks of the phyſician, and may rally again, and regain it's ground, the moment he has quitted the field.

Where medicine is actually neceſſary, the operation of it ſhould be as gentle, and the adminiſtration of it as ſparing, as the nature of the caſe will admit; the beſt conſtitution may be ſhattered by uſing violence in the cure of a diſeaſe, and the ſtrongeſt ſtomach may be loaded with phyſic till it's virtues and efficacy are loſt. We would alſo prefer ſmall doſes repeated more frequently, to large quantities with long intervals; becauſe we are of opinion, that in the latter caſe the medicine frequently paſſes off without making any conſiderable impreſſion, and the diſorder gains ground before the arrival of the regular period of repetition; whilſt the more conſtant uſe of it in ſmaller proportions, will at leaſt keep the diſeaſe under, and by degrees anſwer all the purpoſes intended by the more copious preſcription.

And laſtly, we beg leave to admoniſh our readers to avoid the dangerous rocks of *experiment*. Our endeavours tend to eſtabliſh plain rules, uſeful regulations, and ſimple, as well as gentle preſcriptions. In the uſe and application of all theſe, we truſt they cannot err; but if they ſhould venture to leave the paths we have marked out, and purſue courſes of their own, we can only warn them of the conſequences, without being in the ſmalleſt degree anſwerable for them.

C H A P. III.

Of the Small-Pox.

OF all the diſeaſes to which we are liable, perhaps there is no one ſo univerſally and with ſo much reaſon dreaded, as the *ſmall-pox*. The havock it makes in the deſtruction of the human ſpecies; the ravages it commits on beauty; the injuries offered by it to the organs and faculties of ſenſe; and the deformities, defects, and diſorders, ſo frequently left behind it, operate ſo powerfully on the mind of man, that reſolution itſelf ſhrinks from it's approach, and even philoſophy ſhudders at the firſt alarm of infection.

Whether the firſt principles of this diſeaſe lie hidden and inactive in the human frame till they are called forth to action, and the flame lighted up by the ſpark of infection; or whether it ariſes immediately from the poiſon communicated operating in a peculiar manner on the maſs of blood; is an enquiry that might prove amuſing to a curious inveſtigator, but to our preſent purpoſe would be equally unintereſting and unavailing. Certain it is, that there is not the ſmalleſt reaſon to ſuſpect that it has ever appeared without previous infection; and equally certain, that ſome pre-diſpoſition to receive that infection is abſolutely neceſſary to the production of the diſeaſe; becauſe a thouſand inſtances have occurred, where the ſame ſubject hath been repeatedly expoſed to the contagion without the ſmalleſt effect, and yet has afterwards received the infection from a much more ſlight and diſtant communication with the diſeaſed.

That the ſmall-pox is not a native diſeaſe of this iſland, is univerſally admitted; but the particular time and manner of it's importation, though frequently diſcuſſed, ſtill continues a ſubject of diſpute.

We have claſſed this diſeaſe among thoſe incident to childhood or youth, becauſe in theſe ſeaſons the human body appears from experience to be moſt liable to it; whether from any peculiar diſpoſition to receive the infection, or from what other cauſe, remains yet to be determined.

The ſmall-pox is diſtinguiſhed by two different names; the *diſtinct*, and the *confluent:* each denomination deſcriptive of the kind it denotes.

The approach of both ſorts is preceded

by ſimilar ſymptoms: the firſt of which is generally unuſual wearineſs and diſinclination to motion; then follow ſhiverings ſucceeded by violent heats, thirſt, pains in the head, back, and all the limbs; and, more particularly in grown perſons, a diſpoſition to ſweat, pains at the pit of the ſtomach, ſickneſs, inclination to vomit, offenſive breath, a diſagreeable taſte in the mouth, heavineſs, and inclination to ſleep, which is generally accompanied with reſtleſſneſs and uneaſineſs, and diſturbed with ſtartings and dreams of horror; and immediately before the appearance of the eruption, children and perſons of very delicate conſtitutions are frequently ſubject to convulſions; which laſt were formerly conſidered as very favourable prognoſtics, but have by ſome ingenious modern practitioners been ſpoken of in a very different light; the former notion prevailing from an idea that theſe fits ſerved to *break the fever*, and the latter opinion ariſing from a well-grounded ſuppoſition that they were only indications of a ſtrong and violent one: an opinion ſupported by proofs, that they have in ſome inſtances proved fatal, and in others have ſo weakened the patient, that he has been unable to maintain the conflict with this powerful and painful diſeaſe.

It has alſo been held, that ſome judgment might be formed from the greater or leſſer violence of the preceding ſymptoms, what ſort of ſmall-pox would follow; and from the ſame obſervations, pretences were made to prognoſticate with what degree of ſeverity the diſeaſe would appear; but theſe doctrines have been alſo exploded, daily experience convincing us, that the moſt favourable ſort ſometimes follow very aggravated complaints, and that the confluent and moſt malignant kind in ſome inſtances ſucceed much more moderate and leſs alarming ſymptoms.

This diſeaſe has been divided into four, but more commonly into three periods, each attended with a fever of a different kind; the firſt is the nervous, and accompanies the efforts of nature to ſeparate the infected matter from the blood, and throw it out on the ſurface of the ſkin; the ſecond is of the ardent or burning kind, which appears during the maturation or ripening of the eruption, and which is commonly called the ſecondary fever; and the third, which is occaſioned by a return of the diſeaſed matter into the blood, and is therefore more or leſs putrid.

The appearance and progreſs of the ſmall-pox, (which is undoubtedly a diſeaſe of it's own kind, and perfectly diſtinct from all others) is for the moſt part as follows. In the mild and favourable ſort, the puſtules will begin to appear on the fourth or fifth day from the firſt illneſs, when the preceding ſymptoms will abate, and the diſeaſe will ſhew itſelf in ſmall ſpots of a pale red, ſprinkled here and there over the face, neck, and breaſt, which are the parts in general firſt affected; and at this period a ſweating, which the ſtricteſt attention to keeping the patient cool will hardly prevent, commences, and frequently continues till the puſtules begin to ripen, when it diſappears naturally. On the ſecond day, theſe ſpots begin to be viſible in a more diſtinct form in different parts of the body; and from this time they riſe and fill with a thick digeſted matter of a white colour, which changes to yellow about the ninth, tenth, or eleventh day; after which they will form into cruſts, or ſcabs, and gradually fall off, the intermediate ſpaces of ſkin between the puſtules appearing during the progreſs of a lively red, which continues even after the eruptions have diſappeared.

As the puſtules increaſe in quantity and ſize, the throat is frequently affected with ſoreneſs, and the eye-lids are ſometimes ſo charged with eruptions and diſtended with the ſwelling, that the patient becomes blind; and this ſwelling extends not only over the whole head, but even to the hands, fingers, and feet, and is proportioned to the quantity

tity of eruption; but this is by no means an unfavourable ſymptom, and it abates as ſoon as the puſtules are arrived at the full ſize and ripeneſs, and goes off, as it firſt appeared, by degrees.

The regular declenſion or going off of this diſeaſe, is marked by the falling of the face and change of colour in the puſtules there, in the firſt place, whilſt thoſe in other parts continue full and large. An alteration is next diſcovered in the hands and fingers, and the change follows over the other parts of the body; on the fingers and hands there is ſeldom or ever any ſcurf, or ſcaly matter, but the burſting of the pock finiſhes the proceſs.

The confluent or malignant ſmall-pox has alſo the ſame ſymptoms as the diſtinct and favourable ſort; but the eruption appears generally a day or two earlier, after the beginning of illneſs; and inſtead of the ſweating, it is frequently accompanied by a looſeneſs: the ſooner the puſtules break through the ſkin, the greater apprehenſion there is that they will run together. This ſort ſeldom comes out later than the third day, except in caſes attended by very extraordinary ſymptoms; ſuch as acute pains in the loins or ſide, violent rheumatic aches in the limbs, and uncommon pains in the ſtomach, occaſioning ſickneſs and vomiting; and when the eruption is delayed by ſuch complaints, much danger may be apprehended.

Nor do the ſymptoms, as in the diſtinct ſort, vaniſh on the appearance of the eruption; on the contrary, they continue with great ſeverity, and frequently for many days after this event. In the firſt ſtage, the ſpots are hardly to be diſtinguiſhed, but by the time of coming out, and the preceding ſymptoms, from the meaſles; after a time, they join or run together, and reſemble a red bladder, which covers the whole face, occaſioning an earlier ſwelling than the diſtinct ſort; and as the diſtemper advances, the whole ſurface of the face appears as if a thin white ſkin was ſtretched tightly over it: from the eighth day, or thereabout, this ſkin becomes more rough to the touch, and changes to a dark brown, inſtead of a yellow colour, as in the milder ſort: and this roughneſs and alteration of colour increaſes, until the ſuperficial ſkin cracks and falls off, which does not ſometimes happen, where the diſeaſe has been of the worſt kind, till towards the twentieth day; when the ſkin beneath appears at firſt ſmooth, but is ſoon covered with ſcales, of ſo corroſive a quality, as not only to occaſion pits, ſcars, and even ſeams, but in ſome very bad caſes to ſtrip off the ſkin of the back and ſhoulders, leaving the fleſh bare, and producing actual ſores.

There are alſo certain circumſtances peculiar to this kind of ſmall-pox; in particular it may be obſerved, that the eruptions are of a larger ſort on the hands and feet than on any other part of the body, and that the appearance of the puſtules is generally accompanied by a ſpitting approaching to ſalivation in grown perſons, and by a looſeneſs in infants and children. The ſpitting is at firſt in great quantities, and eaſily diſcharged; but towards the tenth or eleventh days, the matter grows tough and glutinous, and is brought off with extreme difficulty; and about this period of the diſeaſe, the ſpitting ſtops, and very ſeldom returns, though ſome ſuch inſtances have occurred; and when this diſcharge ceaſes, an abatement in the ſwelling of the face, and an increaſe of it in the hands, are very favourable appearances.

The looſeneſs does not attack children at ſo early a ſtage of the diſorder as the ſpitting; but unleſs a ſtop is put to it by medicine, it continues during the whole progreſs of it.

Upon the whole, when the puſtules appear diſtinctly, ſlowly, and gradually; when they increaſe in heighth and ſize, and as well as the intermediate ſkin, preſerve a proper colour; when the ſwelling commences and goes off gradually; and when the ſeveral fevers are moderate, and the change or ripening is effected without the intervention of any extraordinary ſymptom; this diſeaſe is of the moſt mild and favourable kind, and is ſeldom attended with any conſiderable degree of danger.

But when the whole ſurface of the face is covered with puſtules; or when they are intermixed with dark, black, or purple ſpots or blotches; when a continual retention of urine, violent unintermitting pains in the head and eyes, and throbbings in the neck, indicate an increaſing fever; when the ſwellings of the head and face fall before the eruption has arrived to ripeneſs; when a black ſlough or cruſt covers the tongue; when the patient, at the maturity of the puſtules, is ſeized with ſhiverings, faintneſs, or violent palpitations; when there is a diſcharge of blood, either in the urine, or from the lungs, by expectoration or ſpitting: in either of theſe caſes the patient is in imminent danger, and the moſt fatal conſequences may be dreaded.

The introduction and very general uſe of *inoculation* has been productive of the moſt happy and advantageous changes, both in the management and medical treatment of the natural ſmall-pox; and improvements which were ſuggeſted by very eminent phyſicians of the laſt century, but which they were themſelves afraid to adopt, in contradiction to the current of opinion and cuſtom, which at that time ſet ſo ſtrongly againſt theſe ſalutary diſcoveries, have been now univerſally received, and have conduced to the ſaving many thouſands of lives, to the preſervation of beauty and health, and to the reſcuing from terror, diſtreſs, and the moſt poignant anguiſh, thoſe ſuſceptible hearts, who, for themſelves or others, lived in the continual apprehenſion of a diſeaſe which threatened death, deformity, and mutilation.

Till theſe improvements were admitted, it is hardly poſſible to deſcribe the havock made by this peſtilential diſeaſe; but if we look back to the practice which preceded them, we ſhall find the wretched victims of infection confined to cloſe beds in rooms ſtill more confined, and whole families crouded together, and condemned to ſubmit to ſuffocation, in the noxious fumes and intolerable ſtench, which were emitted from bodies in an increaſing ſtate of putrefaction.

We ſhall find them loaded with medicines, oppreſſed with external heat, and inflamed with cordials and ſtimulating mixtures, ſinking under an unneceſſary and acquired burden of eruption; and a new and additional diſtemper conſtituted by the ſurrounding filth of dirty linen and ſaturated bed-cloaths.

We ſhall find an alarm ſounded the moment the firſt ſymptoms appeared, and the various operations of bliſtering, bleeding, and purging, performed, before a ſingle eruption had broke forth; to the total derangement of all the efforts of nature, and to the reducing the patient to ſuch a degree of weakneſs, as to render him very unfit to ſtand the ſhock of the diſeaſe which he was deſtined to endure.

Hence the mortality which almoſt conſtantly marked the progreſs of this baneful diſtemper; and hence the numberleſs miſerable objects of deformity which excited our compaſſion, and encreaſed our horrors, at the approach of the fatal cauſe of them.

But from theſe melancholy ſcenes we may now happily turn our eyes; more pleaſing proſpects preſent themſelves; we can expect the ſmall-pox without the agonies of apprehenſion, and mark it's progreſs without being ſubject to the horrors of deſpair.

A tribute of gratitude is due to thoſe who firſt engaged themſelves in the communication of thoſe important and intereſting diſcoveries; and ſtill more are we indebted to him, who has not only improved theſe arts of preſervation to the higheſt pitch of excellence, but with peculiar liberality and generoſity, has promulgated his knowledge upon the pureſt principles of benevolence, and afforded the world an opportunity of profitting by his labours, ingenuity, and experience.

As we mean, in ſome meaſure, to avail ourſelves of theſe publications, and to add to the practice which has fallen to our ſhare the many admirable directions and opinions of all the moſt celebrated inoculators, in a diſtinct chapter; and as thoſe who labour under the diſtemper in the natural way, will receive the utmoſt benefit by treatment ſimilar to that of perſons taking the infection by inoculation, we ſhall refer our readers to our chapter on that particular ſubject, where they will find rules for the management of perſons in this diſtemper, which as far as human wiſdom extends, may be deemed almoſt infallible, and preſcriptions which have been uſed and approved with repeated and unvaried ſucceſs.

CHAP. IV.

Of the Meaſles, Chicken-Pox, and Swines-Pox.

THE *meaſles*, as well as the ſmall-pox, is ſaid to have been imported into Europe from Aſia, and both diſorders are reputed to have made their appearance in theſe climates about the ſame time.

Perſons of all ages are liable to this diſeaſe; but as children are more peculiarly ſubject to it's attacks, we have thought it right to treat of it in this place.

Very ingenious phyſicians have determined this diſtemper to be rather an inflammation of the lungs, and the eruptions to be conſidered as mere ſymptoms of that diſorder; and have ſupported this opinion by an obſervation, that the cough, pains in the breaſt, and other complaints which precede the appearance of the meaſles, obtain no relief from the eruption, but accompany the diſeaſe through it's whole courſe, and frequently continue long after it diſappears. Others, however, conceive, that it is an eruptive fever of it's own kind, and that the ſcarlet-fever is actually the meaſles in a confluent ſtate; and the latter idea derives no ſmall degree of credit, from the certainty that this diſtemper is infectious, and may unqueſtionably be communicated artificially.

That the air and ſeaſons influence the ſpreading this diſeaſe, is evident from it's being more commonly epidemic in large and populous cities, than in open villages or the country, where habitations are thinly ſcattered; and from it's being generally more prevailing in the ſpring of the year, than during the ſummer or in the autumn.

The approach of the meaſles is foretold by complaints, frequently differing in different conſtitutions. It is uſually preceded by ſhiverings and hot fits, in alternate ſucceſſion, by dulneſs and inclination to ſleep, in children; and in grown perſons, very violent and continued head achs, an univerſal reſtleſſneſs, ſore throat, every mark of inflammation in the eyes, accompanied with the emiſſion of ſharp ſcalding water, ſwoln eye-lids, and a diſability to endure the light without ſenſations extremely painful; a conſtant defluxion from the noſe, promoted by frequent ſneezings, thirſt, loſs of appetite, a diſcoloured yet not dry tongue, ſickneſs, an inclination to vomit, or more uſually a looſeneſs with green and fœtid ſtools, ſweating, a cough and ſuffocation: in ſome caſes the cough, which is ſmall, dry, and irritating, is the firſt ſymptom, and attacks the patient ſeveral days before any other indiſpoſition appears.

The ſymptoms generally proceed with

increaſing violence till the fourth, or in ſome caſes, though theſe do not often occur, till the fifth day, when the eruption begins to make it's appearance in ſmall, round, red ſpots on the face, and thence ſpreading over the whole body in a ſort of continued figure; for though many parts of the ſkin remain free from the eruption, yet it always appears joined together by a chain or ſtring of puſtules, by which circumſtance it may in the early ſtages of it be diſtinguiſhed from the ſmall-pox; in ſome caſes the breaſt and ſtomach are the firſt ſeats of the eruption.

As theſe ſpots ſpread and are enlarged, they are diſcovered to be compoſed of a number of ſmall pimples ſet very near each other, and riſing ſo very little above the ſurface, as to be more perceptible by the touch than to the ſight; theſe inflammatory appearances occaſion a ſwelling of the face, and in ſome inſtances actual blindneſs.

The appearance of the eruption makes but little alteration in the ſymptoms; the ſickneſs and vomiting, indeed, generally ceaſe, though the latter, of a bilious kind, ſometimes takes place a day or two after the eruption, and is productive of relief in a conſiderable degree: but the head-ach, ſuffocation, fever, cough, and complaints in the eyes and throat, rather gain ground than diminiſh; unleſs, as it frequently happens, nature ſhould make a vigorous effort towards their abatement, by a plentiful diſcharge of blood from the noſe.

From the fifth day to the ſeventh, the forehead and face begin to grow rough from the drying up of the puſtules; which, from thence to the ninth day, continue to peel off from the whole body in ſmall ſcales, which have the appearance of bran; and by this time no external remains of the diſeaſe can be diſcovered but a trifling redneſs on the ſkin, which diſappears in a day or two at fartheſt.

But the ſymptomatic complaints are not ſo eaſily diſpoſed of; on the contrary, they rather ſeem to act with redoubled vigour: the cough becomes more frequent, and diſturbs the patient's reſt by night as well as day, threatening an inflammation on the lungs, which too often proves fatal; the difficulty of breathing increaſes; and theſe unpromiſing ſymptoms, which are frequently occaſioned by a regimen and medicines improperly warm, are followed by a looſeneſs, which in many caſes reduces the patient ſo low that his life is in imminent danger.

From the ſame cauſe, it happens in ſome inſtances that the ſpots aſſume a livid colour, and in others become quite black; appearances from whence the worſt conſequences may be apprehended.

If this diſeaſe is accompanied with an inclination to ſweat moderately; if the body continue rather open than otherwiſe, but without ſhewing any tendency to a looſeneſs; if the diſcharge of urine is conſiderable, and the various complaints in the head and eyes, the fever, and cough, decreaſe as the diſtemper advances; little danger need be apprehended from the meaſles themſelves, or of their leaving any ill conſequences behind them.

But if the fever and accompanying ſymptoms gain ſtrength in the progreſs of the diſeaſe; if the ſpots ſhould ſuddenly grow pale or livid, or totally diſappear, and be ſucceeded by coldneſs of the extreme parts, reſtleſſneſs, or delirium; if the patient ſhould be afflicted with great difficulty of ſwallowing, exceſſive ſweats, a violent propenſity to vomit, or convulſion-fits; the utmoſt exertions will be required to produce a change in his favour.

Nor are the dangers attendant on this diſeaſe confined to the exiſtence of it: if the head-ach continues with unabated violence through the whole progreſs of it, that ſpecies of blindneſs which is denominated the *gutta ſerena*, is not unfrequently the deplorable conſequence; and unleſs nature directs ſome critical evacuations, the fever very often outlives the diſtemper, and a continuance of the cough by this time become hectic, and attended by a hoarſeneſs, awakens our ſuſpicions of an approaching conſumption of the lungs.

Through the whole courſe of this diſorder, great attention ſhould be paid to the regimen, which ſhould be generally of the ſame cooling kind as will be hereafter recommended in the inoculated ſmall-pox; but, except under particular circumſtances, acids may be avoided, on account of the cough; nor, for the ſame reaſon, ſhould the patient be indulged in the uſe of ſmall-beer: whey, barley-water, baulm-tea, decoction of the leaves and roots of the common mallow, or of marſh-mallows, and liquorice-root, linſeed-tea, or any other diluting drinks, may be taken freely, ſweetened with honey, or fine ſugar, according to the ſtate of the patient's body; the former being calculated to promote, the latter to reſtrain looſeneſs. But the meaſles does not admit of the ſame freedom with reſpect to air and expoſure as the ſmall-pox; a ſudden change, or a damp or cold air, will in the former frequently occaſion very troubleſome and obſtinate pains in the breaſt, with a ſuppreſſion of breath, approaching to aſthma.

If the ſymptoms are at all ſevere, bleeding will be found neceſſary in the firſt ſtages of this diſeaſe, and muſt be repeated according to age and ſtrength, whenever the continuance of the fever, ſuffocation, ſtraitneſs acroſs the breaſt, or other ſymptoms which ſeem to threaten inflammations of the lungs, appear in any degree to require it. Nor is this operation attended with danger in any ſtate of the diſeaſe; though it will be prudent to omit bleeding where it proceeds mildly, and is not accompanied with unfavourable circumſtances. Bliſtering alſo may be uſeful on the occurrence of violent ſymptoms.

The cough may be ſoftened by a mixture of ſpermaceti, or oil of almonds and ſugar-candy; but the moſt effectual method to relieve both the cough and hoarſeneſs with which it is frequently attended, is to receive the ſteams of warm water, or of tea made with any of the pectoral herbs, into the throat; and for this purpoſe the patient ſhould hold his head over any narrow-mouthed veſſel, about half full of ſuch water or decoction, at leaſt three or four times a day.

Gentle anodynes, ſuch as ſyrup of poppies, or a ſmall quantity (not exceeding a drop or two for a child) of laudanum, in a ſpoonful of any ſimple water, may be repeated every night after the eruption, in caſe of conſiderable reſtleſſneſs or uneaſineſs from the cough; but theſe medicines ſhould not be adminiſtered if the patient is tolerably eaſy, and his ſleep undiſturbed. Great care is at all times neceſſary to prevent coſtiveneſs, a tendency to which ſhould be removed by frequent clyſters.

In caſe of a ſudden check or diſappearance of the eruption, attended with ſickneſs, faintneſs, and a low or irregular pulſe, negus, or even wine and cordials, ſhould be frequently taken, the body ſhould be gently chafed with warm cloths, and bliſters applied to the limbs. Warm plaſters to the inſides of the hands, and ſoles of the feet, or cataplaſms of bread with muſtard-ſeed or horſe-radiſh, may alſo be tried in caſes of emergency; and the immediate application of bliſters is adviſed on the firſt appearance of convulſions, to which very young ſubjects are ſometimes liable.

The bark may be given with advantage in almoſt every ſtage of this diſtemper, eſpecially after the preparation of bleeding and opening the body; it relieves the cough, leſſens the hoarſeneſs, and prevents the advance of other diſagreeable ſymptoms. It is of ſingular uſe in the appearance of purple or black ſpots, taken in ſubſtance from ten grains to thirty, in proportion to the patient's age, in a ſpoonful of any liquid; to which may be added a few drops of ſpirit of vitriol. And as many, if not moſt of the alarming ſymptoms which attend the going off of the eruption, are occaſioned by the return of the diſeaſed matter into the blood, the bark, adminiſtered at this period of the diſeaſe, cannot fail to produce very happy effects. It may alſo be taken with great advantage accompanied by the ſpirit of vitriol, in caſe of any extraordinary diſcharge of blood from the noſe, ſtomach, or bowels.

Purges are neceſſary after the meaſles, but by no means violent ones; nor ſhould they in general be given till the eruptions have entirely diſappeared; but gentle perſpiration, during the wearing off of this diſeaſe, may in moſt caſes be promoted with advantage.

Among the other diſagreeable relics of this diſorder, a looſeneſs is not uncommon; and when it proceeds to ſuch violence as to occaſion conſiderable weakneſs, it ſhould be cautiouſly checked, but by no means ſuddenly ſtopped: a few grains of rhubarb, which may be accompanied with a ſmall quantity of ſaffron, and powder of crabs eyes or oyſter-ſhells, will in general anſwer the purpoſe effectually; but if theſe ſhould happen to fail, the *cortex thuris*, or *elutheria*, may be added in ſmall portions, and gentle opiates given at night; and when this complaint refuſes to ſubmit to medicine, bleeding will in moſt caſes remove it.

Air and exerciſe are great aſſiſtants in the recovery from this diſorder; but the former ſhould never be taken during the prevalence of ſharp or moiſt winds, which will aggravate the cough and endanger the lungs; nor ſhould the latter be uſed in ſo violent a degree as to produce fatigue: a light diet, abſtinence from fleſh, weak and diluting liquors, and in caſes of extraordinary weakneſs, aſſes milk, will conduce to the re-eſtabliſhment of the patient's health.

The *chicken-pox* and *ſwines-pox* differ ſo little from each other, and are attended with ſo little danger or difficulty of cure, that it is not neceſſary to treat of them ſeparately. The only material diſtinction between theſe two diſeaſes is, that the pimples or puſtules of the latter are frequently of a larger ſize than the former; but this deſcription does not apply in all caſes.

The ſymptoms which precede theſe diſtempers, reſemble thoſe of the ſmall-pox, but are much leſs violent, and of ſhorter duration; head-ach, heavineſs, loſs of appetite, and diſinclination to uſe exerciſe, are generally followed by the appearance of the eruption in little more than twenty-four hours from the firſt indiſpoſition. The puſtules firſt appear red in the ſkin, but ſoon riſe, become prominent, and fill with a watery fluid inſtead of matter; and but for this difference, theſe diſorders ſo greatly reſemble the ſmall-pox, as to have been frequently miſtaken for that diſeaſe; a miſtake which may be productive of very fatal conſequences, both in caſe of inoculating from them, and by perſuading the patient that he has paſſed through that diſorder, putting him off his guard, and leaving him expoſed to take the infection in the natural way, at ſeaſons and under circumſtances which may occaſion extreme danger.

All that ſeems neceſſary to conduct the patient through theſe diſeaſes in ſafety, is to direct him to abſtain from animal food, to drink plentifully of diluting liquors, to keep the body rather open during the progreſs of the diſeaſe, and to purge moderately after it goes off, which will generally be in four, five, or ſix days, from it's firſt appearance.

CHAP. V.

On Inoculation for the Small-Pox.

IF we received the firſt infection of this dangerous and loathſome diſeaſe from the Eaſt, we are indebted to the ſame quarter for a diſcovery which has diſarmed the malady of it's terrors, blunted the edge of it's poiſon, and reduced the happy art of conducting the patient in ſafety through this once dreaded diſtemper to a moral certainty of ſucceſs.

The practice of inoculation was firſt introduced into Great Britain by the communications of the ingenious and celebrated Lady Mary Wortley Montague, who acquired the knowledge of it during her reſidence at Conſtantinople with her huſband, in his embaſſy from this court, from certain Armenian merchants engaged in the lucrative traffic of ſupplying the ſeraglios of the ſultan with females; and the ſafety and certainty of this operation may be fairly inferred from it's being practiſed univerſally on the moſt valuable of their poſſeſſions, the moſt diſtinguiſhed beauties which even incredible ſums could purchaſe.

Lady Mary Wortley Montague's ſon having been ſucceſsfully inoculated in the Eaſt, and her daughter ſoon after her return to England, the then royal family ſubmitted to it under the care of Sir Hans Sloane, and all paſſed through the diſeaſe without a ſingle alarming circumſtance.

From this time the practice of it was frequent, but not conſiderable; it gained ground, but ſlowly; owing in ſome meaſure to the weakneſs of the human mind, but much more to certain conſcientious prejudices entertained by many worthy religious and ſcrupulous perſons, and ſtrengthened by diſcourſes from the pulpit and the preſs, fraught with arguments of it's irreligious tendency and probable temporal danger; which, though every argument was immediately anſwered by ſound reaſoning, and the objections to inoculation refuted with equal ability and vivacity, yet the impreſſions in diſfavour of it were too deep to be eaſily effaced, more eſpecially as it's enemies were aſſiſted by the natural and warrantable apprehenſions of every individual for his friend, child, or relative.

In this ſtate, and under this ſtruggle with prejudice, miſapprehenſion, and the want of experimental conviction, it is not ſurprizing that it's progreſs was comparatively ſlow; and that the benefit of a diſcovery ſo ineſtimable, was confined to a few in the upper circles of life, whoſe minds were more enlarged by education and reading, and who had better opportunities of acquiring information than the middle or lower claſſes of mankind.

To the diſcouragements already mentioned we may add, that the few publications on this ſubject were ſo truly profeſſional, and ſo embarraſſed and loaded with terms of art and technical expreſſion, that without literary and medical expoſition, they were wholly unintelligible, and left the ordinary reader either totally in the dark, or confounded and perplexed in labyrinths of art and learning.

But that ſpirit of enterprize and perſerverance which ſo happily diſtinguiſhes the inhabitants of this iſland, began ſomewhat leſs than thirty years ago to ſurmount the difficulties, and remove the obſtacles, which ſtood in the way of this moſt excellent diſcovery. About this time a whole medical family commenced inoculators upon plans of conſiderable improvement on the original art, and connecting themſelves with practitioners in various parts of Great Britain, the practice was extended under the ſanction of their names; and all ranks of people ſubmitted to inoculation, under the perſuaſion, that they might venture to rely on that ſkill and management which had rendered theſe ſucceſsful profeſſors ſo very eminent.

About the ſame time another gentleman of the faculty devoted his time and attention to this ſalutary proceſs; and having practiſed inoculation in a county bordering on the metropolis, with uninterrupted ſucceſs for ſeveral years, was invited to the court of a great and riſing nation, where he performed the operation on the poſſeſſor and ſucceſſor of the throne, with honour to himſelf, and advantage to his royal patients; and this gentleman has alſo, with equal modeſty, ingenuity, and liberality, communicated to the world his whole ſyſtem of improvements, without reſervation, in writings replete with candour, elegance, and perſpicuity.

From theſe publications we have adopted, in our practice, many rules reſpecting regimen, treatment, and medicine; and as we have never found them in any one inſtance fallible, we ſhall recommend them to our readers with the moſt perfect confidence; and wherever we have ventured in the ſmalleſt degree to differ, we beg leave to declare, that we do not prefer our own opinion, but may have caſually admitted ſome variation, in conſequence of circumſtances which may not have fallen under the obſervation of every practitioner of phyſic.

But as we have already hinted at our opinion of inoculation in a moral and religious light, it may not be improper to offer it more explicitly, and to add a few conſiderations on this practice as a matter of national policy.

Though we do not ſcruple to avow, that our judgment is decided in favour of the practice of inoculation; and though, for the general benefit of mankind, we do moſt earneſtly wiſh it may be univerſally received; though we are convinced by reaſon and experience, that the operation is ſafe, eaſy, and effectual; and though we are perſuaded that a candid and diſpaſſionate enquiry would produce the ſame conviction in the minds of all our readers; yet we do not pretend to argue againſt the feelings of nature, or to combat ſcruples of conſcience. To thoſe whoſe objection to inoculation takes place in the former, we will offer a few plain facts, which we truſt will excite feelings of another kind, and direct them to the happieſt iſſue.

Inoculation was introduced, from obſerving the practice of men, who riſqued their whole property, and frequently their lives, on the ſucceſs of it.

It has made it's way through numberleſs difficulties and violent oppoſition, and having ſurmounted both by *ſucceſs alone*, is now received with general approbation.

The bills of mortality will on compariſon prove, that ſince the introduction of inoculation, the fatality of the ſmall-pox generally has leſſened in a very large proportion.

Regiſters, and liſts, which have been kept in various parts of the kingdom, will ſhew, that very few lives *in the whole* have been loſt under inoculation; and that the modern improvements have reduced the ſucceſs of it to a moral certainty.

That various operations, conducive to the preſervation of life, though with much leſs probability of proving effectual, are in daily and hourly practice; ſuch as amputations, cutting for the ſtone, &c. Nor do we apprehend, that when probable death is the alternative, objections would be conſidered as proofs of tenderneſs or affection.

To thoſe whoſe objections ariſe from religious or conſcientious doubts of it's moral rectitude, ſtill fewer arguments will be required; becauſe ſuch minds will not be affected with prejudice, or poſſeſſed with obſtinacy;

obſtinacy: it will only be neceſſary to ſatisfy them, that the practice of inoculation is neither inconſiſtent with our duty to God, our neighbour, or ourſelves, and the objections of ſuch well-diſpoſed perſons will vaniſh of courſe.

The all-powerful and merciful Author of our being, has mixed in the cup of life bitter and ſweet: but he has furniſhed us with means, in many inſtances, to ſeparate the ingredients; nor has he compelled us in any caſe to ſwallow the potion, without uſing thoſe means to render it palatable.

In fractures, ulcers, mortifications, and gangrenes, where amputation can alone prevent certain death, is the performance of this operation conſidered as an unwarrantable interruption of the decrees of Providence; or does any divine or moral precept inſtruct us to prefer the greater danger of the diſeaſe, to the leſſer one which may poſſibly attend the attempt to cure?

Can it be conſiſtently urged, that the exertion of ſelf-preſervation againſt the pains and mortality of an acute diſeaſe, is either derogatory to the honour of God, or inconſonant to his Divihe will?

Let the man of conſcience diſcuſs theſe queſtions religiouſly, and few doubts will remain, but what will be immediately obviated by the ſame conſideration which has been held the ſtrongeſt argument for the truth of the Chriſtian religion. That the progreſs and ſucceſs of inoculation, under great diſadvantages, and againſt the united efforts of cuſtom and prejudice, has inconteſtibly proved, that this practice, far from being diſpleaſing to our Almighty Protector, originated in his goodneſs, and has been promulgated by his diſpenſation.

In a public and political view, the advantages reſulting from this operation are ſufficiently obvious from the calculations above referred to. Population is the great ſinew of a ſtate; to which *preſervation*, as well as *procreation*, muſt contribute: a thouſand lives ſaved, are a thouſand lives gained to the community, and a proportionable addition to it's riches and ſafety.

That thouſands of lives are annually ſaved in theſe kingdoms by inoculation, is beyond the poſſibility of queſtion; that many thouſands more might be in like manner preſerved by rendering it univerſally extenſive, is a propoſition too evident to be contended: and we ſubmit to thoſe patriotic members of the legiſlature, who have exerted great powers of ability in providing for the health and comfort of their fellow-citizens, in a variety of inſtances, whether the eſtabliſhment of ſome general and national plan, for the purpoſe of enabling all ranks and conditions of people to avail themſelves of this life-preſerving diſcovery, might not be attended with the moſt advantageous conſequences, and executed at a very moderate, if not at a trifling expence.

Under the improved methods of *inoculation*, little objection is made to the age or conſtitution of the patient, or to the ſeaſon of the year in which the operation is performed.

As to the former, it ſeems to be the general opinion, that although many children under two years old have been inoculated with ſucceſs, yet the ſafer way is to let them paſs their teething; previous to, and during which, they are peculiarly ſubject to a variety of diſorders; ſuch as fevers, convulſions, and fluxes; which requiring management in ſome meaſure differing from the treatment of the ſmall-pox, may occaſion inconveniences: nor is it altogether reaſonable to multiply diſorders in frames ſo tender, as to run great hazard in getting through thoſe which commonly attack them in the ſtate of infancy; more eſpecially as young ſubjects have uſually a larger burden of puſtules than thoſe of a more advanced age, though they are leſs able to bear them.

To this may be added, the extreme difficulty of prevailing on children to ſwallow medicine of any kind, in the greateſt emergency; and as an eruption heavier than uſual, or other circumſtances may occur, in which there may be an abſolute neceſſity for adminiſtering phyſic, we may in ſuch caſes have the melancholy proſpect of infants dying before us for want of that help, which, though at hand, we are utterly unable to afford them from this untoward circumſtance: and the forcing medicine down their little throats, is attended with ſo much uncertainty, that no dependance can be placed on the quantity actually taken dow n and is productive of ſuch dread and agitation in the patient, as frequently to occaſion convulſion, and other deplorable conſequences.

For theſe reaſons, it ſeems more prudent to defer the operation till after the cutting the firſt teeth is compleated, as the delay is ſo ſhort, and the riſque of infants being expoſed to natural infection not very imminent; but if, from ſituation, the neceſſity of removing them, or other circumſtances, there is great probability of their being infected, recourſe ſhould be had to inoculation, as at every period of life attended with much leſs danger.

In the inoculation of children, attention is recommended to an obſervation, that thoſe who, from the uncommon ſize of their heads, may be ſuſpected of being afflicted with any degree of the hydrocephalus, or dropſy in the brain, have from experience been found improper ſubjects of inoculation; children labouring under this complaint, being always liable to a ſtupor or heavineſs, which this operation hath in ſome inſtances been known to promote, though the diſeaſe of the ſmall-pox hath proceeded with very favourable ſymptoms.

With theſe, and a few other exceptions hereafter pointed out, all ages, and even conſtitutions, have been inoculated with ſucceſs; for, ſurprizing as it may appear, perſons afflicted with habitual complaints of long ſtanding, the gout, the ſcurvy, and the king's evil, the bloated and emaciated, the intemperate and debauched, have been conducted through the diſeaſe without incurring the ſmalleſt ſymptom of danger.

But perſons immediately labouring under acute or critical complaints, thoſe who exhibit ſigns of ſharp and corroding humours, or who from poverty of blood, or any other cauſe, are reduced to a great degree of weakneſs, will require ſuch treatment as may remove thoſe diſorders, before they will be proper ſubjects of inoculation. Nor can it be recommended to conſtitutions liable to frequent returns of intermitting fevers. Women under the courſe of their periodical returns, and thoſe with child, have been inoculated with ſucceſs; but under theſe circumſtances the operation is not adviſeable.

The ſeaſon of the year was formerly underſtood to be a matter of great importance in the determination on this operation; and it has been uſual to wait for the milder ſeaſons of ſpring or fall, however other circumſtances might conſpire to urge the immediate performance of it. But theſe particular ſeaſons have been found leſs propitious than even the heats of ſummer, or the cold in winter; probably, becauſe the food of winter may, on account of the ſmaller quantity of vegetables, fill the blood with groſſer humours, and diſpoſe the body to throw out a larger portion of eruption; and becauſe the autumnal ſeaſon is moſt commonly productive of agues, fluxes, and ſore throats, from the humidity, or moiſture of the air, which generally prevails about the latter equinox.

Indeed, the ſucceſsful practice of admitting freſh air to patients in the ſmall-pox, as an indiſpenſible regulation, renders the ſeaſon of the year when the diſeaſe is to be taken of very little conſequence; it being at all times neceſſary to guard againſt too much warmth, even in the winter, and the heats of ſummer being never ſo intenſe in this country as not to be eaſily avoided by chuſing an apartment with a northern aſpect, which ſhould always be attended to when this operation is performed in the midſt of ſummer.

We are aware, that in treating ſo lightly the ſeaſons of life, and of the year, in an undertaking of ſuch importance, we differ very widely from ſome who have written on the ſubject a few years ago: with theſe, age, month, and even moon, were to be conſulted with ſcrupulous exactneſs; nor was the ſmalleſt deviation allowed from rules of ſuch weight and conſideration; but it muſt be remembered, that inoculation was then only on the road to that perfection, to which from it's almoſt unvaried ſucceſs it ſeems at preſent to have arrived.

Not but that ſome regard ſhould be paid to circumſtances of particular kinds: at whatever ſeaſon of the year any epidemic diſtemper, ſuch as the fever or ſore throat, prevails, it will be proper to ſuſpend our intentions to inoculate, whilſt the poſſible occurrence of ſuch a diſtemper may render the buſineſs we have in hand leſs manageable.

Preparation for inoculation hath till very lately been held to be indiſpenſible; and though modern experience hath tended to leſſen the cautions uſual on that head, yet we do not conceive they are to be altogether rejected in regulating a regimen: perhaps little attention is neceſſary to ſuch as are moderate in fleſh, and enjoy perfect health; but where a very full habit indicates groſs humours, or where the conſtitution, reduced too low, requires corroboration or ſtrengthening, or where the ſtomach or bowels appear to abound with crude matter, ſome regulation may unqueſtionably be attended with advantage.

In the former caſe, a total or pretty general abſtinence from animal food, or the juices, in broth; from cheeſe, and any conſiderable quantity of butter; from fermented liquors, except a moderate uſe of well-concocted ſmall-beer; and from every kind of ſpice, or whatever elſe is of a heating nature; is certainly adviſeable. The diet to conſiſt of fruit-pies, pudding, rice-milk, and other milk meats; ſago, and roots, greens, and vegetables of all kinds, not excepting ſallads; together with eggs and butter in the puddings and pye-cruſt, but not otherwiſe; tea, coffee, or milk-chocolate, for breakfaſt: and all to be taken in ſuch moderate quantities, as not to offend or load the ſtomach.

The uſual time of preparation is nine or ten days before the operation: and under the circumſtances which render this preparation neceſſary, it will be proper for the patient to take, at equal diſtances, three doſes of the following powder, which may be either ſwallowed in the form of pills, or made into a bolus with jelly or ſweetmeats.

Calomel, ſixteen grains—powder of crabs claws, ten grains—golden ſulphur of antimony, two third parts of a grain—emetic tartar, one quarter of a grain.

Theſe muſt be carefully rubbed and mixed in a mortar; and the doſe is from three to four grains for children, and from five to ſix grains for grown perſons, to be taken the laſt thing at night, and to be purged off the following morning with Glauber's ſalts diſſolved in warm water or gruel, and the quantity proportioned to the age and ſtrength of the patient: on the days of purging it will be proper to refrain from eating vegetables.

But all that has been ſaid of regimen and medicine ſhould be applied only to habits of particular fullneſs or groſsneſs; where there is no ſuch appearance, and where there is no ſuſpicion of bad humours or vitiated juices, no ſuch preparation is at all neceſſary, nor any reſtrictions as to diet, till after the infection is actually applied.

In the evening of the day in which the inoculation hath been performed, a doſe of the above powder may be given in quantity as before ſpecified; and from this time the regulations concerning food ſhould be carefully attended to, nor any deviation permitted, unleſs in caſes and under circumſtances which will hereafter be particularly noticed.

But among thoſe who apply for inoculation, women of delicate and tender frames, and men of broken and ſhattered conſtitutions, thoſe who are far advanced in years, and very young children (if circumſtances demand their inoculation at an earlier period than we have before recommended) will require very different management; nor can any general rules for preparation be laid down to ſuit all conſtitutions, any more than any one remedy can be preſcribed to cure all diſeaſes: abſtinence, and the uſe of mercurials, may be as injurious in one caſe, as they are beneficial in another; ſince it is equally dangerous to reduce the patient too low, and to give the ſmall-pox without preparation, to an inflammatory, groſs, or diſtempered perſon.

To ſuch, therefore, as come within the deſcriptions of delicacy, tenderneſs, or debility, either from age or extreme infancy, medicines of a very mild ſort only, if any at all, ſhould be preſcribed; and, in ſome caſes, animal food of the lighteſt kind, and a glaſs of wine, ſhould not only be permitted, but recommended. And in order to aſcertain the neceſſity of preparation, and the nature and degree of it, particular enquiry ſhould be made, and due conſideration had, of the ſtate of health of every individual offered for inoculation, as the ſure means to prevent ill conſequences from either the uſe, or omiſſion, of mercurial medicines and low diet.

The communication of the ſmall-pox by inoculation, hath been performed in a variety of ways; on the firſt introduction of the practice, large quantities of infected matter were applied on pledgets of lint or cotton, to numerous inciſions of certain lengths, depths, and even forms; but this method being productive of diſagreeable ulcers and ſores on the parts, which continued to be troubleſome, and were ſometimes found to be obſtinate, long after the total diſappearance of the diſeaſe, a thread moiſtened with the matter, by drawing it through a ripe puſtule, was ſubſtituted, and being laid between the lips of the inciſion, was ſecured with a plaſter; but this method producing the ſame inconveniences, though in a leſs degree, the following is now recommended, as liable to none of the objections of the former practices.

It having been long determined by experiments which leave no room for doubt, that if the patient receives infection naturally and artificially at the ſame time, or if the natural infection ſhould even have preceded inoculation, but has yet occaſioned no ſymptoms of approaching illneſs, that which is received by the wound, mingling with the blood at once, operates firſt, and deſtroys the diſpoſition of the body to be affected by the natural taint; it will be adviſeable to perform the operation in the ſame houſe, or if convenient, in the ſame room, with the perſon from whom the matter is intended to be taken.

In how ſmall a quantity matter ſufficient to infect the whole maſs of blood, in ſuch a degree as to produce eruptions, may be conveyed into the body, remains yet undetermined; but a thouſand caſes may be adduced to prove, that a very ſmall proportion of what was formerly uſed, will ſufficiently anſwer every purpoſe; and if the poiſon, after it is received into the body, undergoes any favourable alteration in it's quality before it mixes with the blood, which is by no means an improbable conjecture, the more modern method of inoculation muſt be on this account preferable.

The point of a lancet or needle being dipt in the freſh infected matter, either from a puſtule, if in the natural way, or from the place of inſertion if the perſon from whom it is taken is under inoculation, make a ſlight puncture or inciſion on the middle of each arm above the elbow, which may be juſt deep enough to paſs the external ſkin, but need not draw blood (which is however no way material) and the inſtrument being introduced, let it be gently turned, and a ſlight preſſure made with the finger towards the point of it, by which means ſome of the matter will be certainly wiped off, and left within the puncture, or ſcratch.

The infection thus introduced, no application of any kind ſhould be made to the places where it is communicated, for either bandage or plaſter are ſo far from being neceſſary, that they ſerve to prevent the certain diſcovery of the infection having taken place, which will ſhew itſelf by a degree of inflammation about the part; nor are theſe ſlight perforations of the outer ſkin, attended with the dangers of ulcers, ſores, and mortifications, which were frequently occaſioned by inciſions and dreſſings.

But it is not of abſolute neceſſity that the matter ſhould be newly taken from the diſeaſed perſon, it may be preſerved for a conſiderable length of time on the lancet, or needle, and for a ſtill longer, by placing a ſmall quantity of the matter on a ſmooth plate of any hard ſubſtance, and after ſuffering it to dry, ſecuring it from the air: and this matter, moiſtened by the ſteam of water, or a very ſmall quantity of the water itſelf, when it is required to be uſed, will as effectually produce infection, as that which has been recently taken.

Nor does it appear to be in the ſmalleſt degree material, whether the infection be taken from a ſubject of inoculation, or from one diſeaſed in the natural way, either may may be indifferently uſed, and either will produce the ſame effects.

But as doubts have ariſen with reſpect to the particular ſtage of the diſeaſe, at which the matter for infecting ſhould be obtained, it may be neceſſary to remark, that the time generally pointed out for this purpoſe is during the continuance of the fever which accompanies the eruption; though matter taken from the infected parts, even before the appearance of puſtules on other parts of the body, may be uſed with equal ſucceſs; and notwithſtanding opinions have prevailed that the matter is not infectious till the puſtule has arrived to a certain degree of ripeneſs, yet the preſent practice of inoculation has clearly proved, that as ſoon as any moiſture can be taken from the infected part, it is perfectly capable of conveying the infection, and will as certainly produce the ſmall-pox, as matter taken from puſtules in full maturation.

The infection thus communicated, on the evening of the ſame day give a doſe of the powder before deſcribed; and from this time let the regimen be particularly attended to. To grown perſons it will be proper to give a ſmall doſe of Glauber's ſalts, or manna, and the infuſion of ſenna, on the mornings following after the powders are taken; but unleſs the powders ſhould fail to produce a ſtool or two, this will not be neceſſary for children.

The progreſs of the infection will appear in a ſmall degree of inflammation about the punctured part, ſo ſlight at firſt as only to be diſcoverable by the help of a convex, or magnifying glaſs, and this frequently ſo early as the ſecond day: on the fourth or fifth day the part will be ſomewhat hard to the touch, the inflammation will be more viſible, attended with itching, and the immediate ſcratch or puncture will appear to be covered with a kind of thin ſkin, beneath which a ſmall quantity of fluid will be diſcernable; the whole aſſuming the appearance of a burn.

About the ſixth day a pain and ſtiffneſs is generally felt in the arm-pit; and this is conſidered as an agreable ſymptom, foretelling the near approach of the eruption, and denoting a favourable progreſs of the diſeaſe: and at this time another doſe of the powder may be adminiſtered, under the foregoing directions.

Sometimes on the ſeventh day, but more

frequently on the eighth, the ſymptoms of the eruptive fever will begin to appear, ſuch as ſlight remitting pains of the head and back; increaſed ſtiffneſs in the arm-pits; ſhiverings of ſhort duration; and alternate heats, which continue, more or leſs, till the whole eruption is compleat. A very diſagreeable taſte in the mouth, and an offenſive breath, are alſo uſual ſymptoms about this time; and the body begins to emit a ſmell peculiar to this diſorder, at the particular period of eruption: and to theſe ſymptoms may be added the appearance of the infected parts, where the inflammation now ſpreads faſt, and the punctures generally appear, upon inſpecting them through a glaſs, to be almoſt ſurrounded with ſmall puſtules, ſo cloſe together, as to be in a manner confluent; and theſe puſtules increaſe in ſize, and extend as the diſeaſe advances.

On the tenth or eleventh day an efforeſcence or partial eruption, of a lively colour, ſurrounds the place of inſertion, and frequently extends half way round the arm, but more commonly is about the ſize of a ſhilling; and being under the cuticle, or external ſkin, is neither perceptible by the touch, or painful. When this appearance accompanies the eruption of the ſmall-pox, it is of a very pleaſing nature, as it almoſt infallibly predicts a moderate quantity of puſtules, the fever and every other diſagreeable ſymptom ſoon ſubſide, and all danger and difficulty are at an end.

At this ſtage of the diſeaſe it may be neceſſary to repeat the powder, in which caſe it ſhould be given as uſual at night; and on the following morning this laxative draught.

Infuſion of ſenna, two ounces—manna, half an ounce—tincture of jalap, two drams.

But neither the former medicine, or this, will be neceſſary, unleſs the appearance of the eruptive ſymptoms is accompanied with any particular degree of violence; and in that caſe theſe preſcriptions are calculated for grown perſons of robuſt habits and conſtitutions.

And here it may be neceſſary to repeat the remark, that although preparation by regimen and purging medicine may be neceſſary, in the habits laſt deſcribed, yet infants, children, and young people in perfect health, not remarkably groſs or full of blood, will need few or none of theſe precautions; the ſingle doſe of the powder, adminiſtered the day on which the infection is communicated, will generally be very ſufficient for ſuch ſubjects, and in ſome caſes even that may be diſpenſed with.

But circumſtances occur which require a ſtill more frequent repetition of the medicines; for it ſometimes happens, that though the ſucceſs of the operation is perceivable, yet the ſigns are weak, and not ſo perfect as to prognoſticate with certainty the more or leſs favourable event of the diſtemper; the colour about the puncture or ſcratch continuing rather pale than red, little inflammation, the lips of the wound flat, and neither extending, nor occaſioning itching, or other diſagreeable ſenſations; and even to the fifth and ſix day, appearances are in ſome inſtances ſo doubtful, as to leave room for ſuſpicion that the infection has not taken place.

In this unpromiſing ſtate, when the delay of the uſual ſymptoms threatens unfavourable circumſtances, either as to the quantity of the eruption or otherwiſe, it may be right to give the powder even every night, regard being always had to age and conſtitution; and in caſe it fails to operate by ſtool, an ounce of Glauber's ſalts, or the laxative draught already mentioned, on the ſucceeding mornings. By this means the inflammation may be forwarded, which is a very material object, as it may always be obſerved, that when the change in the appearance of the arm, and the eruptive complaints commence early, the progreſs of the diſeaſe will be mild and favourable; but where theſe ſymptoms advance more ſlowly, ſome troubleſome or perplexing accidents may be apprehended.

The progreſs of the eruption is unqueſtionably the moſt intereſting period of this diſtemper; and the management of the patient, according to the modern method, at this particular ſtage of it, differing ſo very widely from former practice, it will be requiſite that the directions on this head ſhould be plain and intelligible: that no neceſſary ſteps may be omitted for want of the reſolution which follows perfect information, nor any hazardous experiments tried which may produce the dangers of the diſeaſe in attempting to avoid them.

When the ſymptoms of the eruptive fever begin to make their appearance, the patient is by no means to be confined to his bed, or even to his room; on the contrary, as ſoon as the purging medicine has operated (if it has been neceſſary to adminiſter it) let him keep abroad in the open air, not ſhrink from it, however diſagreeable; being equally cautious not to ſtand ſtill, and to avoid the contrary extreme of violent exerciſe; and if he is troubled with thirſt, let him quench it in draughts of cold water.

Harſh and adventurous as this treatment may at firſt ſight appear, the ſalutary effects of it have been ſo confirmed by the experience of uninterrupted ſucceſs in the practice, that it admits of few exceptions: and even in caſes where the eruptive ſymptoms have been aggravated, and the patients extremely diſinclined to any degree of motion, they have been prevailed on to leave their beds; and after being led into the air, and having drank plentifully of cold water, have experienced a return of ſpirits and appetite; and having reſted well, gentle ſweats have been ſucceeded by moderate eruptions, the fevers have abated, and all their diſagreeable complaints have vaniſhed.

But in general the eruptive ſymptoms are ſo very light as to produce no diſinclination in the patient to this part of the regimen; on the contrary, he neither experiences depreſſion of ſpirits, loſs of appetite, or want of ſleep: a few puſtules appear pretty equally diſperſed over his body, which gradually ripen as the inflammation ſpreads about the punctures, and theſe are alſo ſurrounded by eruptions which advance to maturity with the reſt; and the diſorder proceeds and goes off without the intervention of a ſingle alarming circumſtance, and almoſt without the ſenſations of pain or indiſpoſition. During ſuch a progreſs of the diſeaſe, the enjoyment of cool air ſupplies the place of medicine; or ſhould any particular languor or faintneſs happen, a glaſs of wine or a ſmall quantity of weak broth may be admitted in the day, or a little white-wine whey going to bed; and theſe indulgences may perhaps be more frequently neceſſary to perſons of tender or debilitated conſtitutions.

By the regimen above preſcribed, and the alterative purging medicines and cool air at the period of eruption, terrifying ſymptoms, and large quantities of puſtules, are in moſt caſes avoided: and certain it is, that thoſe who are moſt inclined to keep abroad, conforming in all other reſpects to the regulations laid down, generally paſs through the diſeaſe more eaſily than thoſe who confine themſelves within doors; and are in general ſo ſenſible of the benefit they derive from the air, as to ſolicit others in the ſame ſituation, rather to ſubmit to it at firſt as a hardſhip, than to forfeit the advantages with which the uſe of it will be certainly attended.

As ſoon as the maturation or ripening is compleated, and no farther apprehenſion remains of danger from the diſeaſe, the courſe of diet may be altered to one ſomewhat more generous: boiled meats, ſuch as chicken, mutton, or veal, may be allowed in ſmall portions; but particular caution ſhould be uſed in the return to the ordinary quantities of animal food; and ſome reſtraint will be neceſſary for a certain time, both with reſpect to this kind of diet and the uſe of fermented liquors.

If the parts where the infection was received ſhould not compleatly heal up, at the time the ſcabs of the pock fall off, but ſhould continue to diſcharge matter after that event; this appearance is occaſioned by ſome peculiarity in the habit, which ſhould be removed by gentle purgatives and alteratives, the wounds being in the mean time covered from the air, and the inconveniency which may ariſe from the adherence of the linen prevented by a plaſter of white cerate, or any other inoffenſive ointment.

Having deſcribed the whole progreſs of the ſmall-pox by inoculation, and given rules for preparation, regimen, medicine, and management, in the ordinary courſe of the diſeaſe; it will be neceſſary to direct our conſideration to ſuch deviations and unuſual ſymptoms as may occaſion embarraſſment, difficulty, and apprehenſion of danger; and to point out the means ſuggeſted by reaſon, and ſupported by experience, for the removal of theſe ſymptoms, and of the doubts which may ariſe reſpecting the event.

A violent ſickneſs, accompanied with vomiting ſometimes, though not very frequently, comes on about the commencement and progreſs of the eruptive ſtage of this diſtemper; and to get rid of this complaint, the ſtomach ſhould be immediately cleared, and the vomiting promoted, either by drinking plentifully of warm liquids, or by giving to grown perſons—

> One grain of emetic tartar, carefully mixed with ten grains of the common powder of crabs-claws.

Leſſening the doſe proportionably for children, or perſons of tender, delicate, or reduced habits.

If this medicine diſcharges the bilious matter, occaſions ſtools, or produces a gentle ſweat, relief will immediately follow; if, however, it ſhould fail to procure ſtools, and the ſickneſs continues, a little opening phyſic will in moſt caſes abate the complaint, and the appearance of the eruption remove it entirely.

Another deviation from the uſual ſymptoms, and which ſometimes alarms us as the eruption approaches, is a kind of eryſipalas or raſh; frequently, though not conſtantly accompanied with ſickneſs. When this appearance is only partial, in ſpots or patches on different parts of the ſkin, it ſoon goes off, and need not occaſion much concern.

But this raſh is ſometimes ſo univerſal over the whole ſurface of the ſkin, and appears ſo mixed with the ſmall-pox in the earlieſt ſtate of eruption, and ſo much reſembles the confluent malignant kind, even in being accompanied with red and purple ſpots, that the cloſeſt inſpection with glaſſes has proved ineffectual to diſtinguiſh it, and the difference hath only been diſcovered by a ſtrict attention to the concomitant ſymptoms.

In the raſh of which we ſpeak, neither the reſtleſſneſs, pain of the head or loins, or the loſs of ſtrength, are ſo conſiderable as in the confluent ſmall-pox, when attended with the malignant appearances of putridity; and upon a very cloſe examination, the ſmall-pox may be diſtinguiſhed from the raſh, in ſcattered puſtules, differing from the reſt in ſize. In every caſe of this ſort, it will be neceſſary to keep within doors, but not in bed; to refrain from the uſe of water, or any thing elſe cold; and if any ſickneſs remains, ſomewhat cordial, but not ſtrong, ſuch as white-wine whey, or weak negus, may be given; and this treatment will moſt probably prevent the complaint from becoming alarming: in two or three days the colour of that part of the ſkin which is covered by the raſh turns duſky, but the puſtules of the ſmall-pox preſerve their florid appearance, and advance properly without farther inconvenience from this eruption.

From the diſappearance of this raſh, as before deſcribed, pretences have been made to diſcharge a conſiderable part of the eruption of the actual ſmall-pox by ſpecific medicines, and to limit the number of the puſtules that ſhall remain, at the will of the medical attendant: but the fact is, that the ſmall-pox, after it has once appeared, will never be partially removed; that the pretence has taken riſe from the natural going off of the raſh, and may be productive of very dangerous conſequences, if the patient ſhould be induced to venture into the cold air, by which this eruption may be ſuddenly repelled, and the bad effects may be very ſenſibly felt, either immediately, or in the future progreſs of the diſeaſe. It is no very uncommon caſe, for the ſame kind of raſh to appear even before the infection hath been communicated, and whilſt the patient is under preparation; to which, and the medicines, it may probably be at that time owing; but whatever be the then cauſe of it's appearance, it ſeldom fails to return about the time of eruption.

Though the approach of the eruptive ſymptoms happens in general about the period already mentioned, yet this is a matter which is not always to be depended upon; in ſome inſtances, the diſtance from the time of communicating the infection is conſiderably ſhortened, and in others protracted, even days beyond the uſual expectation.

In the former caſe, the part where the inoculation has been performed will exhibit certain ſigns of infection, and the puncture or ſcratch will appear inflamed and elevated on the third, or even the very next day after the operation; and this ſymptom will ſometimes be accompanied with ſome other of the following complaints: ſhiverings, itching, and a trifling pain in the part, or ſometimes on the ſhoulder; drowſineſs, a ſlight head-ach, and giddineſs. In ſome, theſe ſymptoms are attended with a feveriſh heat; from which, however, others are perfectly free; and on the whole, the indiſpoſition is not unfrequently compared, by the patients themſelves, to the effects of intemperance or a ſlight cold, and ſeldom laſts twenty-four hours, or increaſes to ſuch a degree as to require confinement. At the time of theſe complaints, the inflammation of the arms advances rapidly, and the parts become hard to the touch; but as the ſymptoms abate, the inflammatory appearances decreaſe alſo; the ſkin changes from a red to a livid colour, the punctured parts dry up in common ſcabs, and within the ſpace of a week the whole affair is over.

Nor is the want of other eruptions peculiar to caſes where the ſymptoms have been brought on ſo ſuddenly: when the approach of them hath been at the uſual diſtance from the time of giving the infection, that is to ſay, on the ſeventh or eighth day, the expected appearance of puſtules has failed, and the diſorder has gone off as deſcribed in the former caſe. And in both, a few abortive eruptions will ſometimes appear, moſt probably in conſequence of inoculation; yet they differ from the true pock, and never arrive to any ſtate of maturation; and at the end of two, three, or four days, dry away, without leaving any marks behind them.

On the firſt occurrence of ſuch ſubjects, doubts aroſe, whether the infection had performed it's office ſufficiently to ſecure the patient from the danger of being attacked by the diſeaſe in future; and in order to aſcertain the fact, experiments have been made of inoculating again perſons who had paſſed through the diſeaſe without any eruptions, or without any ſuch as ripened in the regular way, and of expoſing them to infection by a communication with the diſeaſed; and the reſult of theſe experiments hath been, that though the wounded ed part (in caſe of ſecond inoculation) hath commonly appeared inflamed for a day or two, yet no ſymptom of diſorder hath followed, nor hath the expoſure to natural infection been attended with any conſequence whatever. From whence theſe two ſatisfactory concluſions may very fairly be drawn; that the deficiency of eruption has not been owing to the patient's having paſſed through the ſmall-pox unobſerved in ſome former part of his life; and that inoculation, attended with the uſual ſymptoms, without any other eruptions than thoſe which occaſion the inflammation about the part inoculated, will as effectually ſecure the patient from future danger of this diſeaſe, as if the infection had produced the uſual or any quantity of puſtules.

It may alſo be proper to mention another irregularity which is ſometimes obſervable in the courſe of this diſeaſe, as produced from inoculation; which is, that when the fever and other ſymptoms of eruption are in a great meaſure gone off, and even after the appearance of ſuch a number of puſtules, as that the eruptive ſtage of the diſorder ſeems compleat, freſh eruptions will appear, and continue to come out for ſeveral ſucceſſive days; and the appearance of theſe new puſtules is in ſome caſes, though not frequently, accompanied with a head-ach, but no other complaint; and they generally die away ſoon after their coming out, and rarely or ever arrive at maturity. But certain very particular inſtances have happened, where this ſecond crop hath been preceded by a ſmart fever, and other ſymptoms of illneſs, and the puſtules have even exceeded the firſt eruption in number, and have remained and ripened in the regular time.

But no pretence can be taken from theſe ſingular caſes, to ſuggeſt the poſſibility of inoculated perſons being liable to have the ſmall-pox a ſecond time; becauſe even where theſe ſecond eruptions have appeared, the whole proceſs of the diſeaſe hath been compleated within the uſual time from inoculation, during the continuance of the inflammation on the inoculated parts, and in a ſhorter ſpace than would have been expected from infection taken in the natural way: ſo that theſe diſtinct appearances of puſtules have moſt probably been occaſioned by the patient's having been kept low and cool in the firſt period of the diſeaſe, and that regimen having been remitted from an apprehenſion that the eruption was compleat.

It has alſo ſometimes happened, that though the ſymptoms have been favourable, the proceſs regular, and the puſtules few in number; yet after the eruption, and when all apprehenſion was over, the patient has been alarmed with a ſevere attack of the fever, an uncommon degree of reſtleſſneſs, and in children, who are unable to expreſs their complaint, ſuch fits of crying as to betray evident tokens of extreme pain: theſe ſymptoms are diſcovered to originate from puſtules on the inſide of the mouth, the internal ſkin of the noſe, or in the gullet or throat; and as theſe complaints ariſe from a ſwelling or tenſion of the parts, occaſioned by the earlier ripening of the eruption, where it is kept conſtantly hot and moiſt, ſo any little cordial ſufficient to produce a ſlight perſpiration, will in moſt caſes remove them within twenty-four hours.

There are alſo caſes in which it will be neceſſary to relax conſiderably from the ſeverity of the regimen, both with regard to diet and air; for though the open air and evacuations are abſolutely neceſſary, when a conſiderable degree of fever, or other alarming ſymptoms, indicate the probability of a great or unfavourable eruption, yet ſuch treatment is not required, at leaſt not in the ſame degree, where the complaints are leſs violent, or the patient of a more tender frame or delicate conſtitution; and ſhould in ſome ſuch caſes be entirely diſpenſed with, if any apprehenſions occur that the expoſure may affect the patient too ſeverely.

Nor is the adherence to a very cold regimen ſo indiſpenſibly neceſſary after the completion of the eruption; on the contrary, it may in many caſes be attended with danger, and where the puſtules are extremely numerous (which no art or precaution will in ſome inſtances prevent) it may be neceſſary for the eaſe of the patient that he ſhould be confined to his chamber; for however devoid of danger the caſe may be, and however diſtinct the puſtules, yet they will altogether occaſion much ſoreneſs and pain, and diſqualify the patient from enduring the fatigue of motion.

But under theſe circumſtances, care muſt be taken that the room to which the patient is confined is not kept too *hot*, nor ſhould it in any caſe exceed moderate warmth; for the change of air from a hot to even a cool and airy room will be attended with danger, and ſhould be very attentively avoided.

In the inoculated ſmall-pox it ſometimes happens, that a conſiderable fever remains after the eruption, the ſkin ſeems ſtretched and painful, and the throat becomes ſo ſore as to occaſion difficulty in ſwallowing; in ſuch caſes a bliſter-plaſter has been recommended to be applied on the punctures or inciſions, which are generally the principal ſeats of complaint, being ſurrounded by a cluſter of puſtules, frequently confluent, and occaſioning ſome ſwelling or ſtraitneſs of the ſkin, and inflammation; a diſcharge, therefore, of the acrid matter from this ſource of the whole diſeaſe, ſeems the obvious method of procuring relief. The bliſter may be about the ſize of a crown-piece, or leſs, according to the extent of the inflammation, and may be compoſed of—

> Powdered cantharides, or Spaniſh flies—and common yellow baſilicon.

The plaſter ſhould be laid on ſoft linen cloth, and the edges of it prepared to adhere, by being ſpread with the common ſticking-plaſter, ſo that the bliſter may be prevented from ſlipping, or being rubbed off from the part, in the patient's ſleep; but the immediate inciſion or puncture ſhould be covered with a doſſil of lint or cotton, before the bliſter-plaſter is laid on, which ſhould remain about twelve hours, and then be removed and dreſſed with yellow baſilicon ſpread on a pledget of lint, and the whole covered with a plaſter of the following cerate; the preſcription for which is given, as not only making the beſt plaſter for dreſſing bliſters, but in other caſes an innocent healing ſalve or ointment, and very proper to be applied as the exterior dreſſing of many other wounds and ulcers.

> Take of olive-oil, half a pound—yellow wax and prepared calamy, of each a quarter of a pound. Melt the wax with the oil, and as ſoon as the mixture begins to congeal, ſprinkle in the calamy, and ſtir well till the whole is quite cold. This is the common Turner's cerate, and called in the London Diſpenſatory, cerate epulotic.

Though this method of applying bliſters in the inoculated ſmall-pox hath not been uſually practiſed, yet it hath been ſo frequently tried of late, and hath ſo conſtantly been attended with ſpeedy and effectual relief, that it ought to be recommended to general uſe on ſuch occaſions, bliſters on other parts of the body being much more troubleſome and leſs efficacious; beſides, that the little additional pain which follows bliſtering the part already ſore and inflamed, is no conſiderable object, with children more eſpecially: nor does the bliſtering protract the healing of the inciſions; on the contrary, it hath been remarked, that thoſe which have been bliſtered are generally whole before others to which no application hath been made.

To what has been ſaid of variations, ſymptoms, and effects, in the inoculated ſmall-pox, may be added, that in ſome caſes, but particularly thoſe of children, though the eruption hath been moderate, and the puſtules of a good kind, yet very early in the diſeaſe the inoculated parts have been highly inflamed, and have occaſioned reſtleſſneſs, and even a degree of fever; whenever this happens, a common poultice of bread and milk will remove the complaint with certainty.

If a treatment ſo very different from that which prevailed ſo many years, even after the introduction of inoculation, has occaſioned ſome alarm, and excited doubts and apprehenſion, it will ceaſe to be matter of aſtoniſhment, when we reflect, that until within a very few years, it was univerſally thought right to promote the efforts of nature in throwing out the eruption, by lying in bed in moſt caſes where any degree of fever or other violent ſymptoms appeared; and even where they were moſt moderate, by ſtrict confinement to a bed-chamber; and that the modern practice enjoins cool air, cold drink, and evacuations, in every caſe unattended with very particular circumſtances.

Yet experience hath ſtamped the higheſt marks of preference on the method of management laſt mentioned; uninterrupted ſucceſs in the diſeaſe itſelf hath confirmed it's utility, and the conſequences have been of a nature ſo highly advantageous, as to obviate one of the principal grounds on which the objections to inoculation have been founded.

Common, and frequently well-founded complaints were made, that the old method of inoculating expoſed the patients, (children in particular) however mildly they had been treated by the diſeaſe itſelf, to future conſequences, attendant on this manner of producing the diſtemper, dangerous in their natures, and alarming in their effects; that they were often ſubject afterwards to abſceſſes in the arm-pits, tedious inflammations in the eyes, and loathſome and obſtinate ulcers at the places of inoculation; and theſe unfavourable appearances have been repreſented as the natural and probable conſequences of unnaturally introducing a diſeaſe into the body, at a time when it might not be properly diſpoſed to receive it, and occaſioning a change, in all likelihood for the worſe, in the patient's whole habit and conſtitution. And by ſuch arguments, ſtrengthened and corroborated by unqueſtioned proofs, that ſuch caſes as above deſcribed very often occurred, many ſenſible and candid perſons were deterred from inoculation, under an idea, that by ſubmitting to it they might incur the danger of worſe evils than thoſe they ſought to avoid.

But on the ſtricteſt enquiry into the condition of thoſe who have paſſed through inoculation under the modern treatment and management, ſcarce an inſtance can be found, (it may be very fairly ſaid, not one in a thouſand) where the ſmalleſt inconvenience hath followed this diſeaſe; and in the very few caſes of ſubſequent indiſpoſition, the complaints have, without exception, either originated in ſome diſorder exiſting before the communication of the infection, or were of thoſe kinds which ſo often ſucceed the natural ſmall-pox; ſuch as little breakings out, or trifling boils, which have always yielded to a ſlight doſe or two of purging phyſic.

Under the modern practice, the inoculated part itſelf is leſs ſubject to thoſe troubleſome and diſagreeable conſequences ſo commonly attendant on the old method; in general, the punctures keep pace with the diſeaſe in progreſs, maturity, and diſappearance, and it very rarely happens that any thing like a ſore hath remained after the ſmall-pox hath dried up and gone off: whereas the ſize and depth of the inciſions in the old method, the quantities of matter, and the chirurgical dreſſings applied, very often occaſioned diſagreeable and obſtinate diſcharges, ſloughs, and other unfavourable appearances, which continued to teize and perplex the patient and his attendants for weeks (nay, in ſome particular inſtances, months) after every trace of the diſtemper had been worn out and effaced.

Nor is the preſent management leſs effectual in the prevention of a complaint ſo uſual after the former practice of inoculation, as to have excited terrors in thoſe who were otherwiſe well inclined to the operation, and to have introduced very alarming apprehenſions. Few patients eſcaped without being more or leſs affected by inflammations in the eyes, and that not only in the courſe of the diſeaſe, but for ſo long a time after, as to create very juſtifiable fears for the ſafety of thoſe invaluable organs; but under the cool regimen, ſuch effects are ſcarce ever diſcoverable at all, and where they are, in ſo very ſlight a degree as not to require the ſmalleſt aſſiſtance of art. A puſtule very near the eye will ſometimes occaſion a tenſion, and in conſequence, an inflammatory appearance; but the departure of the pock removing the cauſe, the effect follows of courſe.

Moſt certain it is, that the cool and repellent regimen now adviſed, is replete with all the advantages of the former method of treatment, with the addition of many others which have been already enumerated; that it is liable to none of the inconvenient and diſagreeable conſequences ſo generally complained of whilſt the latter management prevailed; and that, as the practice of inoculation now ſtands, candour muſt allow, that though it is not to be expected that the operation ſhould carry off old diſorders, yet it neither introduces or leaves behind it any new ones; and that many inſtances have occurred, where conſtitutions have received much benefit from paſſing through the ſmall-pox under the preſent methods of treatment, but no ſingle one can be produced where it has occaſioned the ſmalleſt change for the worſe.

Having very copiouſly diſcuſſed the ſubject of inoculation in the preparation, operation, proceſs, and effects, and I truſt very fully eſtabliſhed the ſafety and expediency of the modern treatment and management; it remains for us to perform our engagement made in a preceding chapter, and to conſider how far generally, or in what caſes in particular, the cool and repellent regimen, and the whole modern method, or any part of it, may be applied with probability or hope of ſucceſs, when the ſmall-pox is produced from infection taken in the natural way.

And here it will be neceſſary to obſerve, that the opportunities of making experiments, and of acquiring from experience that degree of knowledge which can only arrive to any kind of certainty, are not only much leſs frequent in the caſes now before us, than in thoſe which ariſe from inoculation, but the judgment formed from them is much more indeterminate and inconcluſive; becauſe in the former, recourſe is ſeldom had to medical advice till after the firſt ſtages of the diſeaſe have made very conſiderable progreſs, and the ſeaſon for uſing ſuch means as might have been preventive of alarming ſymptoms hath been ſo irrecoverably loſt, that extreme danger hath preſented itſelf at the moment that aſſiſtance is procured, and the far more laborious taſk of removing difficulties hath immediately occurred; and in the latter caſe, every ſpecies of attention, both in the articles of prevention and cure, hath accompanied the proceſs, from the firſt infection of the patient to the laſt period of the diſeaſe.

Yet occaſions have not been wanting to try the efficacy, and prove the utility of treating patients, who labour under this diſorder from natural infection, in nearly the ſame manner as we have preſcribed for thoſe who receive it from inoculation; and ſuch ſatisfactory proof hath ariſen of the ſalutary effects and happy conſequences, which have in a variety of inſtances followed an adherence to theſe reſtrictions and regulations, that we think ourſelves warranted to recommend

mend the obſervance of them, under certain neceſſary reſtraints, and with ſome exceptions, as a general line of preſervation from the preſent and future horrors of this hitherto dreaded diſtemper.

The *confluent* ſmall-pox, the melancholy effects of which are but too viſible in many unfortunate individuals who have been the victims of it's malignity, claims our firſt and chief attention; and if the ſubſtitution of a mode of treatment, different in all reſpects from that under which thoſe melancholy conſequences enſued, will produce ſymptoms ſo different as to leſſen our fears of death and deformity, and increaſe our hopes of not only preſerving our lives, but the comforts of them, it is an object to be purſued with zeal, earneſtneſs, and aſſiduity.

It has been already remarked, that in the natural ſmall-pox, it is not uſual to look for medical aſſiſtance till the appearance of the eruption itſelf, determines beyond a poſſibility of doubt, the nature of the diſorder; by this time it is too late to expect *all* the good which might have been hoped from an earlier application, though ſome efforts may yet be made to abate the rigour of the unfortunate patient's fate.

It is therefore of great importance to be acquainted with the means of diſtinguiſhing the approach of this diſeaſe from that of certain fevers, to the preceding ſymptoms of which thoſe of the ſmall-pox bear a very ſtrong reſemblance; but knowledge of this ſort muſt be acquired by great attention, which will in moſt caſes, where opportunity offers of making the obſervations in time, enable us to prognoſticate with tolerable certainty what particular diſeaſe will follow.

If the fever runs remarkably high; if the hot and cold fits, but in particular the latter, be long and ſevere; if loathing and vomiting ſucceed, and are accompanied with pains in the head, back, and loins; if the patient appears oppreſſed with wearineſs, and diſturbed with a great degree of reſtleſſneſs; if his breath is uncommonly offenſive, and he complains of a very diſagreeable taſte in his mouth; and if theſe ſymptoms ſhould have the additional ſupport of any probable danger of recent infection; little doubt can be entertained of their indicating the approach of the ſmall-pox: but ſhould that not happen to be the caſe, there is no reaſon to apprehend that the regimen which ſuch a belief points out, will prove in the ſmalleſt degree injurious, ſhould the complaints terminate in any other kind of fever.

Suppoſing, therefore, that we are apprized, by all or ſeveral of theſe ſymptoms, of the approach of the ſmall-pox, the ſame medicines, adminiſtered at the ſame times, in the ſame proportions, and ſubject to the ſame exceptions; the ſame regimen as to diet, and the ſame treatment as to air, which hath been already directed for inoculated patients, may be recommended on the beſt authority, that of experience, as the ſureſt means to obviate the difficulties, and ſurmount the dangers, to which the ſufferer under this diſeaſe is much more certainly liable under the old and very contrary practice: nor do we over-rate the value of the modern management, when we conſider it as the higheſt improvement in the art of healing, that either ever has been, or in all probability ever will be made; becauſe we may venture to affirm, that taken at it's firſt ſtage, as we are now ſtating it, the fatality of this diſeaſe may be leſſened in the proportion of at leaſt four parts in five; and that conſequently the introduction of inoculation, and applying the ſame treatment to perſons infected in the natural way, may, and actually does, extend to the annual ſaving of many thouſands of lives, contributing to the happineſs of individuals, and proving a national bleſſing.

In all caſes, then, where this diſeaſe is ſo diſcoverable by early ſymptoms, the management is already ſhewn; what follows muſt relate to patients, on whom, for want of ſufficient indications or prognoſtics deciſive enough to aſcertain the nature of the diſtemper, the preventive methods could not be tried, and on whom the eruption is already out or beginning to appear.

In the latter caſe, the mercurial powder may be immediately adminiſtered, and the purging draught ſhould follow it on the ſucceeding morning, as directed in the ſmall-pox by inoculation; the patient ſhould alſo be moved about in the open air; and if the progreſs of the eruption does not occaſion an abatement of the ſymptoms, but they ſhould continue or increaſe in violence, the medicines ſhould alſo continue to be repeated at intervals during the courſe of the eruptive fever; and from this treatment great hopes may be entertained that the eruption may be checked, and the conflux and conſequent danger in a great meaſure prevented.

But we are not to expect that the effects of regimen or management will be ſo immediately and ſenſibly felt in the natural diſeaſe, where the ſymptoms are generally violent, as in inoculation, where they are for the moſt part much more moderate; nor ſhall we eaſily ſucceed in perſuading patients, who have taken to their beds to ſeek relief from violent pains and ſevere indiſpoſition, to quit them for the diſagreeable ſenſations of motion, and the chilling effects of expoſure to the open air.

Yet ſuch an expoſure will in general occaſion a conſiderable abatement of heat upon the ſkin, reducing the degree of it from violently hot to moderately warm; leſſening the ſtrength and fullneſs of the pulſe, which however will continue quick; and ſhould it even intermit, it is not in this caſe to be conſidered as an alarming ſymptom.

Though the pain in the head derives certain relief from the cool air, yet it does not ſo certainly, at leaſt not ſo immediately, follow in the complaints of the back and loins; ſo that the neceſſary motion is productive of much trouble and fatigue: notwithſtanding which, the patients themſelves are in general ſo ſenſible of the benefit they receive from this toilſome undertaking; and from the alteration they begin to feel, entertain ſuch hopes of farther and future eaſe, that in moſt caſes they perſiſt in the ſtruggle with uncommon reſolution; and finding the head-ach return on their retiring out of the air, are as anxious as their attendants to enjoy the advantage of it.

If the patient has complained of conſiderable ſickneſs at his ſtomach, the medicines will in all probability promote it to vomiting; and this diſpoſition ſhould be encouraged by drinking freely of ſome warm diluting liquid, avoiding the cool air during this operation of the medicines, and for ſome time after, till the fatigue and perſpiration occaſioned by it are entirely gone off.

This effect of the medicines, being followed by ſtools, will in a great degree leſſen the fever heat, thirſt, ſickneſs, and univerſal pains; and though the patient will ſometimes appear low after theſe evacuations, yet the ſymptoms being abated, and the ſtomach capable of taking nouriſhment, a little thin broth of chicken or mutton, tea, gruel, and milk, will in moſt caſes procure conſiderable refreſhment; and a diſpoſition to ſleep ſucceeds, which ſhould be indulged, but *upon* the bed only, in the day time, nor ſhould the patient go into it till he lays down for the night.

By this conduct the fever preceding the eruption, and the many painful and diſagreeable ſymptoms which attend it, will in moſt caſes be alleviated, and the appearance of the puſtules be delayed; and however dangerous ſuch a conſequence may have appeared in the old method of treatment, yet experience has convinced us, that the later the eruptions appear, the more mild in general is the diſeaſe; and we have good reaſon to believe, that the puſtules are not only retarded by the modern practice, but that they actually appear at length in a much more favourable manner, both as to numbers and ſize, than might have been expected from warm and encouraging management.

We have hitherto ſpoke only of the natural ſmall-pox, as taken in the earlieſt period, and at the commencement of the eruptive fever; and we have ventured to recommend the ſame treatment as we have directed under inoculation, without the ſmalleſt doubt of it's being attended with very conſiderable ſucceſs; but when theſe methods have been neglected till the eruption has made it's appearance, or till it is compleat, the danger is become more alarming, and a greater degree of caution and attention is neceſſary in our attempts to relieve by means ſo very oppoſite to thoſe which have in all probability been hitherto uſed.

An abatement of the troubleſome ſymptoms is the uſual conſequence of the completion of the eruption, and this agreeable change frequently lulls the patient and thoſe about him into a falſe ſecurity, and they wait without apprehenſions for the ſeaſon of maturation, which, from the numbers and nature of the ſmall-pox, often comes attended with alarming and dangerous circumſtances.

But even ſhould danger be apprehended at this ſtate of the diſeaſe, few attempts are in general made to prevent it; the maturation is looked forward to as the criſis of poſſible relief; inſtead of which it is too often accompanied with ſuch complaints as prove fatal, in ſpite of the utmoſt ſkill which can then be exerted.

But in this interval between the eruption and maturation, ſome endeavours ſhould ſurely be made to avert the impending danger; for during this time the ſymptoms become aggravated, the ſtrength of the patient is exhauſted, and if he ſurvives the change of the puſtules, he frequently ſinks under the fever which accompanies or ſucceeds that event.

In this ſtage of the diſorder, late as it may ſeem for the uſe of preventives, yet it may be adviſeable to try the powder heretofore directed, at any time before, but not after the ſmalleſt ſigns of approaching maturation or ripeneſs; the frequency of giving it muſt in all caſes be regulated by the ſtrength and condition of the patient, and the following laxative draught, in the quantity of a ſmall tea-cupful, may, if neceſſary, be taken at ſome diſtance after the powder, and repeated ſo as to procure three or four ſtools in twenty-four hours; but this will only be required when the powder does not produce the ſame effect.

> Cream of tartar, one dram—manna, half an ounce. Diſſolve them in one pint of barley-gruel, or tea made from any of the pectoral herbs.

But neither the adminiſtration of the mercurial and opening medicines, the carrying the patient into the open air, or even the admiſſion of cool air through the windows, can in this ſtate of the diſorder be recommended as perfectly conſiſtent with ſafety; nor do we know any particular caſes which have occurred to diſcourage ſuch endeavours to mitigate the ſeverity of the unhappy patient's fate. Thoſe who have reſolution to make the trial, we think ought not to be prevented; nor, on the other hand, do we adviſe the experiment under authorities of equal weight with thoſe advanced in the caſes of inoculation; though it is by no means improbable, that as experience has now fully juſtified the cool and repellent treatment in the ſmall-pox produced by inoculation, ſo the ſame excellent guide may in ſome future day make the uſe of it univerſal in that diſeaſe, even where it is occaſioned by natural infection; excepting only, that the medicines of both kinds ſeem wholly improper when the ſmall-pox is accompanied with the fatal and malignant ſymptoms of bleeding or purple ſpots.

At preſent, therefore, it muſt be left to the diſcretion and judgment, or to ſpeak more properly, the choice of the patient, and his friends and attendants, either to venture on methods which have been ſometimes practiſed with ſucceſs, but which may be conſidered as *poſſible means* of avoiding *certain danger*, or to purſue the old method of treatment, under ſuch improvements as reaſon and ingenuity have from time to time ſuggeſted.

In the latter caſe, it will be prudent to conſider very attentively the ſtate of health, habit of body, and conſtitution of the patient, before the attack of the ſmall-pox: on theſe circumſtances, and on the judgment to be formed from ſuch enquiries, muſt depend, in a great meaſure, the mode of treatment. But it muſt be remembered, that we are now treating of *the natural ſmall-pox, in that ſtage of the diſeaſe which follows the eruption*; the eruptive fever, and all the preceding ſymptoms, having been conſidered under the head of *inoculation*, and rules and regulations preſcribed, which will very properly apply to moſt, if not all caſes of natural infection at that period of the diſorder.

If the riſing or filling of the puſtules is prevented by extreme reſtleſſneſs, gentle opiates ſhould not be neglected, though the quantity ſhould be carefully proportioned, ſo as to produce quiet, and not ſtupefaction: a tea-ſpoonful of poppy ſyrup now and then, at the diſtance of five or ſix hours, may be given to a young child, and the quantity increaſed to a table-ſpoonful for a grown perſon; for whom even this addition will ſometimes prove inſufficient, in which caſe a few drops of laudanum may be ſubſtituted.

If any degree of coſtiveneſs ſhould attend the riſing of the ſmall-pox, it ſhould be removed by gentle emollient clyſters; at any rate ſtools ſhould be procured, nor ſhould the patient be ſuffered to remain much more than twenty-four hours without this evacuation: a ſtool or two every day will greatly tend to cool and relieve. And the following drink hath been recommended as extremely refreſhing, and very uſeful to abate the heat, and allay the thirſt, which generally attends the ſmall-pox, and in particular the ſevere or malignant ſort, about the time of maturation.

> Mix one part of the weak ſpirit of vitriol with two parts of the ſweet ſpirit of vitriol, to the quantity together of half an ounce—add to this three pints of barley-water, or other diluting pectoral drink—and take it at pleaſure.

A foul mouth, or dry and chopped tongue, ſhould be frequently waſhed, and the throat gargled with jelly of black currants diſſolved in warm water; or with honey and water, and a ſufficient quantity of the currant-jelly, or of vinegar, to ſharpen it.

A ſuppreſſion of urine, or difficulty of making water, is a complaint very common in this diſeaſe; a tea-ſpoonful of ſweet ſpirit of nitre may in ſuch a caſe be added to the patient's drink; but moving him either out of the bed, or if that cannot be accompliſhed, ſetting him upon his knees, will uſually procure relief, and a free and large diſcharge of urine is attended with very good effects in the ſmall-pox.

When this diſeaſe is in ſo malignant a ſtate as to be accompanied with black, purple, or livid ſpots, it will be neceſſary to have immediate recourſe to the Peruvian bark, which may be given in ſubſtance, and repeated as often as the patient's ſtomach will bear it; and it ſhould be adminiſtered in the following form.

> One dram of the bark powdered—one ounce and a half of common water—half an ounce of ſimple cinamon water—and one ounce of lemon or orange-ſyrup. This may be ſharpened by the addition of a ſmall quantity of the ſpirit of vitriol.

To a child, a table-ſpoonful ſhould be given every hour, and to grown perſons three or four; and as the effect depends on a ſufficient quantity being taken, it ſhould not be omitted, as often as it will remain on the ſtomach without exciting vomitings or reachings.

When theſe deplorable ſymptoms appear, the patient's food and drink ſhould be particularly regulated: the former ſhould be preſerved fruits, of an acid quality, and apples boiled or roaſted; and the latter ſhould conſiſt of generous wines, moderately diluted, and ſpirit of vitriol, lemon-juice, orange juice, currant-jelly or vinegar, ſhould be added to every draught.

Nor is the bark only preſcribed in the putrid or ſpotted ſmall-pox; it may be adminiſtered with ſucceſs in thoſe kinds where the puſtules do not maturate in the uſual form, but where they fill with a thin, clear, and acrid matter, of a paler colour than that of the mild and favorable ſort of this diſeaſe; and is often of great efficacy in promoting a due preparation of the matter, and filling the pock with that of a proper colour and conſiſtence. And inſtances have frequently occurred where the uſe of the bark and acids hath effected this change, when the eruption hath been quite flat, the matter tranſparent, and the whole appearance very unpromiſing.

Bleeding, alſo, has in ſome inſtances been found very ſerviceable, when the puſtules have flattened or ſubſided. Cataplaſms to the hands and feet, may ſerve to promote the ſwelling, and very ingenious phyſicians have in ſuch caſes recommended bathing the extremities in warm milk and water, and even the whole body to the breaſt.

Such a number of boils on the body are attended with ſo much ſoreneſs and uneaſineſs, that the moderate uſe of gentle opiates is generally neceſſary about this time, to aſſuage the pain occaſioned by the violent inflammation of the puſtules and ſkin: for though the ſoreneſs and anxiety complained of are generally good ſymptoms, and the want of thoſe ſenſations would indicate danger, yet it is neceſſary to contribute as much as poſſible to the patient's eaſe, which in this caſe can only be procured by opiates; of which the ſyrup of poppies may anſwer the purpoſe with children, but grown perſons will require a ſmall quantity of laudanum.

The ſecondary fever comes on with the firſt appearance of an alteration or change of colour in the puſtules; and this is conſidered as the moſt dangerous period of the diſeaſe, which generally proves more mortal in this than in any other ſtage.

At this turn of the diſtemper, nature frequently makes her effort to relieve the patient by the evacuation of purging; and this diſpoſition ought to be encouraged, a change being made in the patient's regimen as to diet and drink, which ſhould at this time be more nouriſhing and generous, in order to ſupport thoſe critical and ſalutary diſcharges.

If at the approach of the ſecondary fever, the pulſe beats quick, hard, and ſtrong; if the heat becomes intenſe, and the breathing is attended with difficulty; if acute pains of the head are accompanied with any tokens of approaching delirium; [illegible] be neceſſary to bleed immediately, [illegible] delay may be attended with conſequences fatally irrecoverable. The ſtate of the blood then drawn will ſhew it's very inflammatory condition; and this appearance will account for the inflammations on the eyes and lungs, quinſies, rheumatiſms, and external abſceſſes, which frequently ſucceed this diſeaſe.

But, on the contrary, if in the ſecondary fever the pulſe becomes low and languid; if the puſtules and the ſpaces of ſkin between them turn pale; if the patient is ſeized with any degree of faintneſs, or his extremities grow cold or clammy; bliſters and warm medicines are recommended; and even the free uſe of conſiderable quantities of warmed wine, hath been in ſuch caſes adviſed.

If towards the cloſe of the maturation, the ſalivation or ſpitting ſhould abate very conſiderably, and the matter grow ſo thick and glutinous as to be thrown off with difficulty, the ſame methods may be taken to promote the diſcharge of it, as are already recommended in the directions for the management of the ſmall-pox by inoculation.

Opening the puſtules, when they arrive at maturity, hath been alſo adviſed; nor do we ſee any reaſon why the taking off a load of acrid matter, and leſſening the tenſion or ſtretching of the ſkin, both which no doubt contribute to keep the ſecondary fever high, ſhould be attended with any ill conſequence; it has certainly been practiſed with ſafety, and may probably prevent the marks which the matter corroding under the ſcab generally occaſions.

But this operation ſhould not be performed till the puſtules turn of a yellow colour, and may either be effected with ſciſſars or the point of a needle, and the matter taken off as it flows with dry linen; but as the puſtules fill again, and ſometimes even a third time, it will be neceſſary to open them repeatedly, at leaſt as long as they ſhew any conſiderable quantity of matter. The eruption in the face generally changing firſt, the operation will begin there, and may be extended to the other parts of the body.

Nor is this operation attended with any degree of pain or inconvenience; with children it may be performed whilſt they ſleep, without the ſmalleſt danger of awaking them; nor does it occaſion the leaſt ſmarting or ſoreneſs, but generally alleviates the inflammation which accompanies this ſtage of the diſeaſe.

At this period of the diſtemper it is of no ſmall advantage to ſhift the linen of the ſick, which muſt by this time be grown exceeding foul, ſtiff, and offenſive, and extremely troubleſome and uneaſy to them; beſides that it pollutes the air of the chamber, and renders it ſo unfit for reſpiration, as not only to affect the patient, but to be almoſt intolerable to thoſe in health, who are engaged in attendance, and other neceſſary offices about the diſeaſed: nor is the inconvenience confined to the immediate loathſome effects of this ſpecies of impurity; the contagious particles of this poiſonous exhalation paſſing into the blood again through the lungs, tend to it's farther corruption. Nor ſhould freſh air be excluded, under proper precautions, and with due regard not to make too ſudden a change, or too violent an impreſſion; but the removal of the offenſive linen, and opening windows and doors with prudence, will frequently produce very extraordinary effects in the recovery of thoſe who have ſuffered under the ſeverity of this diſeaſe; nor is it at all neceſſary, or even proper, that the linen intended to change the patient ſhould be previouſly worn by another perſon, whoſe perſpiration will certainly render it unfit for the intended purpoſe of refreſhing and comforting the ſick: whatever apprehenſions may have been formerly entertained, no manner of danger attends the putting on clean linen, provided it be made perfectly dry, and reaſonably warm.

Nature frequently attempts to throw off, by a diarrhœa or looſeneſs, the great quantity of ſuppurated matter, which, after the compleat maturation of the puſtules, either falls into the ſtomach and inteſtines from the glands and other veſſels, or is ſwallowed from the mouth, throat, &c. but if this ſhould not happen, clyſters will at this time be extremely proper; for this maſs of corruption lying long in the guts, and becoming daily more putrid, grows at laſt ſo extremely acrid, as actually to corrode them, or ſo greatly irritates them as to bring on the very worſt kind of purging, a dyſentery, and ſo produces a diſeaſe where nature pointed out a remedy.

Nor ſhould the uſe of cool and lenient

opening medicines be at this ſtage of the diſeaſe omitted; the ſecondary fever is kept up by the ſuppreſſion of perſpiration, from the cruſt which covers the ſurface of the ſkin; ſome diſcharge is required to be ſubſtituted in it's place, and the moſt natural, ſafe, and effectual, may be procured in this way.

Though it has been generally thought right to purge after the ſmall-pox, yet it will be found to be more or leſs neceſſary, according as the patient hath been coſtive, or the contrary, during the courſe of the diſeaſe; but at any rate it will not be proper to neglect it wholly, leſt boils, ſwelled glands, and ulcers, ſhould follow, which is not unfrequently the caſe.

Stewed prunes, in which have been infuſed the leaves of ſenna, is a proper purge for young children, to which may be occaſionally added a little rhubarb in powder. Youths and grown perſons may take from eight to twelve grains of rhubarb at night, and the like quantity of jalap the following morning; and theſe purging doſes may be repeated three, four, or five times, as circumſtances require.

When the diſeaſe has been ſevere, ulcers and impoſthumes will ſometimes follow: no attempts ſhould be made to repel or diſperſe theſe humours, but they ſhould be ripened by common poultices of bread, milk, and oil, as ſpeedily as poſſible; and after they have burſt, or been opened, as neceſſity may direct, the patient ſhould be purged, and for ſome time confined to a milk diet, and adviſed to the uſe of the Peruvian bark, which may be adminiſtered in ſubſtance in Port wine and water, or wine alone, according to the age and ſituation of the patient, which will alſo direct the proportion of quantity, from one dram to five or ſix, which ſhould be repeated daily as long as theſe complaints continue.

From the univerſal prevalence of this dreaded diſeaſe, it's various ſymptoms, appearances, and effects; the great improvements already made in the artificial communication, and ſubſequent management of it; the happy application, in ſome inſtances, of the ſame treatment in the natural ſmall-pox; the great hopes which may be entertained of extending this preſervatory ſyſtem beyond the narrow limits of private and particular opinion, by repeated experiments of it's ſafety and ſucceſs; and the neceſſity which appeared of preſcribing with ſeveral alterations, and under different regulations, the old practice, in ſome circumſtances, until the more modern ſhall have received the unqueſtionable ſanction of confirmed experience; we have been induced to dedicate a large part of our work, and a conſiderable portion of our attention, to the conſideration of this diſeaſe, and to the pointing out the moſt obvious and approved methods of averting the dangers, and obviating the difficulties, which may occur in the approach, progreſs, and diſappearance of the ſmall-pox.

And from the whole, the following inferences may be drawn, with a ſufficient degree of preciſion to influence the practice, and direct the conduct of the medical aſſiſtant, the neceſſary attendant, and the patient himſelf.

That inoculation is in almoſt every caſe adviſeable, as an eaſy, ſafe, and certain method of paſſing through the diſeaſe, without the anxiety of mind, bodily pain, and riſque of probable evil conſequences, always attendant on the ſmall-pox taken from natural infection.

That the preſent method of conveying the infection by a ſlight puncture, or ſcratch, and leaving the infected parts without covering or dreſſing, is more conſonant to reaſon, and more likely to produce the diſeaſe in a mild and favourable way, than deep inciſions, large quantities of infectious matter, and dreſſings, pledgets, and plaſters, tending to promote immediate ſuppuration.

That no ſingle inſtance hath been well proved, that the infection, communicated in this way, hath ever failed to perform it's office, or that any perſon who hath paſſed through this diſeaſe under inoculation, hath ever been ſubject to the contagion afterwards, either in the natural way or otherwiſe.

That the modern cool and repellent regimen and management, under the regulations of prudence, and the reſtrictions of caution, according to the rules heretofore laid down, may be relied on as generally ſucceſsful, and never detrimental.

That the gentle mercurial medicine preſcribed, either taken as a preparative, or according to the directions given, in the progreſs of the diſeaſe, is attended with the happy effect of contributing to abate the violence of the ſymptoms, and to leſſen the ſeverity of the diſorder, both as to fever and quantity of eruption.

That cool air, and cold water, at a due diſtance from the adminiſtration of the medicine, will increaſe the good effects of it; but that indulgence in theſe articles, during it's immediate operation, may counteract it, and occaſion diſagreeable conſequences.

That the various complaints ſaid to have uſually followed inoculation in the old method, are by the modern treatment wholly avoided; under which, inoculation may be ſaid never to have injured one conſtitution, but to have benefitted many.

That the ſame medicines, regimen, and management, may be happily applied in the natural ſmall-pox, whenever the ſymptoms aſcertain the diſeaſe before any appearance of eruption, and will, in general, in all ſuch caſes, contribute in a very conſiderable degree, to prevent the load of puſtules, and the conſequent fatal effects of this diſeaſe in it's natural ſtate.

That even on the firſt appearance of the eruption, the medicine hath been adminiſtered, and cool air admitted, with great ſucceſs; but that this practice is not ſo fully eſtabliſhed as to afford us ſufficient grounds for general recommendation; though where there is no want of reſolution, either in the patient or thoſe about him, to give a fair trial, little doubt can be entertained of it's proving highly beneficial.

And that where opportunities do not offer to meet the diſeaſe in it's progreſſive ſtate with preventives, and maturation has approached without recourſe being had to the cooling and repellent means, the old method of treating the natural ſmall-pox may receive very conſiderable improvement, by attending to the foregoing directions on that head.

It may be neceſſary, before we conclude this chapter, to take ſome notice of an opinion which long prevailed univerſally, and in the ſupport of which many advocates may ſtill be found; though we confeſs the evidence of facts, ſupported by common reaſon, have ſo fully convinced us, that we beg leave to declare we are not of that number.

Till within a very few years, the ſmall-pox has without a queſtion been conſidered as an epidemic diſeaſe; and phyſicians, and other writers of the firſt learning and eminence, have dwelt with much ſubtilty of argument, and plauſibility of reaſoning, on the regular courſe and certain returns of this diſorder at fixed times and ſtated periods, paying no regard to contagion, or condeſcending to attribute the appearance of it to any ſuch ordinary event.

But in order to ſupport the idea that any diſorder is truly epidemic, it is neceſſary to believe, that no traces can be diſcovered of the firſt infection, but that it hath generated in the human body without any external cauſe, or been occaſioned by ſome diſpoſition in the air, or other natural or ordained concurrence of circumſtances.

Whatever may be the caſe with reſpect to many other diſorders, this conception can by no means reach that of which we are now treating; as it is well known, and eſtabliſhed as a fact, that the ſmall-pox made it's firſt appearance in this country about the thirteenth century, and is univerſally allowed to have been imported from Aſia by ſome of thoſe deluded bigots who were induced by pretences of religion to follow leaders actuated by far different views, to thoſe wars which have ſince been diſtinguiſhed by the title of Cruſades.

Having thus traced the origin of the diſtemper, it will follow of courſe, that the progreſs of it muſt have been occaſioned by the communication of infection; for if it can be generated without contagion, what reaſon can be aſſigned for it's never appearing in this iſland till within the laſt four or five hundred years; or how are we to account for it's not having viſited ſome parts of Europe longer than ſeventy or eighty years, or for it's total forbearance of ſome particular ſpots which were never known to be ſubject to it's influence.

Nor need we be at a loſs to conceive, that after raging with violence in particular places for a conſiderable length of time, it may ſuddenly diſappear, and not viſit the ſame ſpot again for a certain number of years; becauſe after it has gone through thoſe who have been born or ſettled ſubſequent to it's laſt viſitation, the progreſs of the diſeaſe muſt be ſtaid for want of ſubjects, who will be renewed again by the ſame means in a certain courſe of years; and the contagion being again communicated, either by the infection of the atmoſphere with the effluvia of perſons ſick of the diſtemper, by travellers from infected places, or by other natural and common accidents, the diſeaſe will again reſume it's fury, and rage as long as it finds ſubjects to work upon, and then ceaſe as before.

But the effect of inoculation puts this matter beyond doubt; at all times, at all places, at every ſeaſon of the year, and in every temperature of the air, the diſeaſe is produced from communicated infection without the ſmalleſt riſque of failure, and that too, not only in places where it hath lately, but where it doth at the very time prevail in the natural way; the patient under inoculation receiving the infection, and going through the diſeaſe, without being in the ſmalleſt degree affected either by the air then actually infected, or being liable to the ſymptoms of the natural ſmall-pox, though ſurrounding him on every ſide.

To this may be added, that there are certainly ſome perſons ſo conſtitutionally framed, as never to be ſubject to any degree of this diſtemper; and though it may be attended with great difficulty to account for this exemption, or to deſcribe the nature of it, yet the fact hath been aſcertained not only by the concurrent teſtimonies of the perſons themſelves, their relations, friends, and thoſe with whom they have paſſed their lives, but by experiments of repeated inoculation and expoſure to natural infection; neither of which have produced the ſlighteſt ſymptom of the diſeaſe; and ſuch perſons have paſſed through life without appearing to be at all liable to it.

But the number of thoſe ſo circumſtanced is comparatively ſmall; and when we conſider that the utmoſt extent of human penetration reaches not to the power of diſcovering by any ſigns, marks, or ſymptoms, the conſtitutions ſo framed, and that therefore ſuch perſons are doomed to paſs their lives in a ſtate of conſtant apprehenſion and anxiety, we can hardly treat this peculiarity as a favourable diſtinction.

We ſhall conclude this part of our work with a few caſes, ſelected moſtly from eminent and popular writers on this ſubject; for though we have ourſelves carefully examined and applied, in the courſe of this work, ſuch as have fallen within our own knowledge, yet in a diſeaſe ſo univerſal as the ſmall-pox, exhibiting ſuch an amazing variety of ſymptoms, ſituations, and widely different circumſtances, we think it may afford our readers ſatiſfaction, to give them an opportunity of tracing the whole progreſs of this diſtemper, where it has been accompanied with any ſingular appearances; a method which we mean alſo to follow in ſome other of the moſt affecting and dangerous maladies of which we ſhall have occaſion to ſpeak.

CASE I.

Of the Raſh and Eryſipelatous Appearance on the Skin in the Eruption of the inoculated Small-Pox.

A Strong healthy man of twenty-four was inoculated on the ninth of the month; the eruptive complaints began about the ſeventeenth day of the month, and the eighth from inoculation. On the tenth day from inoculation, a ſwelling attacked one arm from the elbow to the ſhoulder; and the other was affected, but in a leſs degree: in the evening of the ſame day he complained much of ſoreneſs and pains about his ſtomach, and the whole ſurface of his ſkin was now covered with a raſh, and blotches or ſpots differing in ſize and colour; the former being compoſed of very ſmall pimples reſembling the firſt appearance of the confluent ſmall-pox, and riſing above the ſkin; the latter interſperſed here and there, but even with the ſkin, and ſmooth to the touch; ſome not larger than a flea-bite, and others of a much larger ſize; ſome of a dark purple, and others livid. But theſe appearances were not accompanied with any conſiderable fever, nor was it attended by any pains in the head or back, or by any extraordinary weakneſs. At the patient's going to bed he was directed to drink a baſon of wine whey, and by the morning the raſh had aſſumed a leſs inflammatory hue, and was changed to a darker; large puſtules of the real ſmall-pox were now plainly diſtinguiſhable, and from this time every thing went on in the uſual favourable way: the arms, however, retained the livid colour for ſome little time, but gave the patient no uneaſineſs; nor did any other extraordinary ſymptom intervene in the whole proceſs, but the diſeaſe was mild, and got through perfectly well.

CASE II.

Of the Raſh before the eruptive Symptoms, and the Return of it at the Approach of the Eruption.

A Young woman, twenty years of age and in perfect health, after taking two of the preparatory powders, was ſeized with a ſlight fever and ſickneſs at her ſtomach, and theſe complaints were followed by a raſh of the foregoing deſcription; on this appearance the operation of inoculation was deferred a few days, in which time the raſh was entirely gone. On the ſeventh day after ſhe had received the infection, the eruptive ſymptoms came on, accompanied with a higher degree of fever, and more violent pains than uſual in the head and back, and attended alſo with ſickneſs and vomiting; and theſe ſymptoms were followed by the univerſal return of the ſame kind of raſh as had appeared before: the patient was now adviſed to keep her room, and the following medicine was directed to be taken immediately.

Compound powder of crabs claws, one ſcruple—emetic tartar, one grain.

This medicine operating moderately by vomit, and diſcharging ſome bile, and alſo procuring ſtools, the ſtomach was relieved; but the raſh remained, and aſſumed ſo much the appearance of the confluent ſmall-pox, as to excite ſome degree of doubt and apprehenſion in the medical attendant, notwithſtanding the ſimilar appearance in the early part of the preparation; and this doubt was heightened by the continuance of the fever, and of the pains in the head and back. Under theſe complaints, the patient was directed to confine herſelf to her room, but not to her bed; and a ſaline mixture, with a ſmall addition of the compound powder of crabs claws, was preſcribed and immediately taken.

On the tenth day from inoculation, diſtinct puſtules of the ſmall-pox were viſible, the raſh grew of a paler colour, and no other particular or unfavourable ſymptom appeared in the progreſs of the diſeaſe, at the termination of which the ſkin peeled off, as uſual after a common raſh.

CASE III.

Of the ſudden Appearance of the Symptoms after Inoculation, and the haſty Progreſs of the Diſeaſe.

ON the nineteenth of the month, a florid young man, and perfectly healthy, received the infection in both arms, and on the very ſame day felt a diſagreeable numbneſs and ſtiffneſs in one arm, from the inciſion to the ſhoulder; and at night, going to bed, he took a pill containing five grains of calomel.

On the twentieth, the ſame ſenſation had extended itſelf to his head, in which he felt ſome pain; and the complaints in the arm continued this day (in the evening of which he took another mercurial pill) and all the next.

On the twenty-ſecond, after a reſtleſs night, none of theſe ſymptoms were abated, but they received the addition of a ſtiffneſs in the ſhoulders; the pulſe quickened, but little or no fever, and the inciſions were uncommonly forward.

On the twenty-third, the patient rode fifteen or twenty miles, although he had diſcovered ſeveral pimples about him before he went out, and on his return in the afternoon many puſtules were diſcoverable, which had every appearance of ſmall-pox; his arms were alſo in the ſtate uſual at the period of eruption, and the complaints or eruptive ſymptoms were entirely gone.

The twenty-fourth, he followed his amuſements abroad.

The twenty-fifth, the puſtules haſtening to maturation, he was requeſted to keep ſomewhat more in the houſe, where they ripened ſo ſpeedily, that,

On the twenty-ſeventh, he took a purging medicine, and the following day was diſcharged from all reſtraint, and continued from that time in good health.

CASE IV.

The like.

ON the fifth of the month inoculation was performed on a healthy man of thirty-eight, and on the ſeventh his arm itched much, and exhibited certain ſigns that infection had taken place.

Soon after the inflammation about the places of inoculation abated very conſiderably, the inciſions appeared inclinable to heal, and the patient was free from uneaſineſs about theſe parts, and from any other ſymptoms of indiſpoſition.

But on the twelfth and thirteenth, he was attacked by pains in his limbs and head, and ſtiffneſs under his arms, which may always be conſidered as a ſtrong proof that the infection has operated; yet the pulſe underwent no change, nor was there any ſign of fever, but a very few pimples ſucceeded theſe complaints, ſome of which diſappeared ſoon, and others remained long enough to have a little matter, but in a very irregular way; nor, but for the almoſt infallible tokens at the places of inſertion, would theſe eruptions have been determined to be the ſmall-pox.

However, to remove all doubt, the patient was inoculated again, but without any effect.

CASE V.

Of the ſudden Appearance, and going off of the uſual Symptoms without any Eruption following.

ON the ſecond of the month, a young gentleman of nineteen took the infection; and,

On the third, having taken an airing in an open chaiſe, was ſurprized by rain, and returned wet.

On the next morning, he complained of not having reſted well; of ſhooting pains in his head, and ſomewhat of a ſore throat; which complaints, as well as a feveriſh heat which attended them, he aſcribed to his having taken cold the preceding day: at this time there was a quickneſs in his pulſe, not accompanied with heat, but with a moderate perſpiration.

About ten he got out of bed, but did not go abroad the whole day; and complained of pains in his head and ſhoulders, of wearineſs, and an itching and uneaſy ſenſations about the inciſions.

On the fifth, he found himſelf better, and went abroad, ſtill attributing his indiſpoſition to the ſuppoſed cold. But at this time, the places of inſertion were conſiderably inflamed, and the whole appearance of them ſo forward, as to afford room for conjecture that the inoculation would terminate here.

On the ſeventh, the inflammation of the inciſions was ſo conſiderably abated that they ſeemed diſpoſed to heal.

No eruption having appeared, and there being now no probability of any, the patient was inoculated again in the evening of the ſeventh, with other matter from a ſubject who had the diſtemper in the natural way; but no marks of infection followed the ſecond operation; and he continued for ſome time to put himſelf in the way of receiving the natural infection, but without the ſmalleſt effect.

CASE VI.

The like.

A Man, aged twenty-four, was inoculated on the eighth of the month, and was directed to take two calomel pills; one the ſame evening, the other the following; and the ſucceeding morning an ounce of purging ſalts, which operated well.

From hence to the eleventh, he complained of a little giddineſs; and on the tenth, of about an hour's head-ach; but was in other reſpects perfectly well, only that his arm had itched much.

On examining the inciſions, on the eleventh, they appeared conſiderably inflamed and ſeemed in all reſpects as if the eruptive fever was juſt approaching.

On the twelfth, he complained that his arm-pit was ſtiff and felt ſwelled; and he alſo mentioned having ſome pain in one of his ſhoulders.

However, all theſe ſymptoms went off, and he continued perfectly free from every kind of illneſs, till the fifteenth, when the arms appeared as uſual in the mildeſt proceſs of this diſtemper, not entirely free from inflammation, nor much affected with it.

On the fifteenth, this patient was inoculated again, and particular care taken to convey a ſufficient quantity of infected matter.

On the ſixteenth, he took a gentle purge of manna, in the infuſion of ſenna; but he continued quite well, and the repeated inoculation did not produce the leaſt ſign of infection.

CASE VII.

Of the Appearance of new Puſtules after the eruptive Complaints had ceaſed, and after that Stage of the Diſeaſe had been ſuppoſed to have paſſed.

A Healthy young man was inoculated on the ſixth of the month: on the eleventh and twelfth he complained of pains in his limbs, head, and back, and had fits of heat and cold alternately.

On the thirteenth, he found himſelf much eaſier, though the pains in his head and back continued; and on this day the inoculated parts gave evident tokens of infection, though the ſkin at the lips of the inciſions was pale, and did not ſeem elevated; nor was there any appearance of thin matter under the external ſkin, as uſual in the regular proceſs of infection; or had the patient felt much uneaſineſs about the places of inſertion, or any ſtiffneſs or ſwelling in the arm-pits.

On the fourteenth, he was free from complaint, but great parts of his arms appeared diſcoloured, and two or three puſtules were diſcoverable about the places of inſertion.

On the fifteenth, near a hundred puſtules appeared on different parts of the body.

On the ſixteenth, the puſtules advanced very properly, and the patient ſeemed perfectly well, but the places where the infection had been introduced were covered with a very conſiderable number of ſmall pale-coloured confluent pimples, and the inciſions were depreſſed inſtead of being raiſed, which ſometimes happens, and commonly foretels an ulceration of the parts towards the concluſion of the diſeaſe.

On the ſeventeenth, a ſhivering fit attacked him in the middle of the day, which was ſucceeded by heat, and by violent pains in the limbs, head, and back, continuing all the following night. He likewiſe complained of pains at the inciſions, arm-pits, and ſhoulders.

In the morning of the eighteenth, the pains at the inciſions and one arm-pit ſeemed to be increaſed, and were accompanied by a high fever and quick pulſe; and a ſecond eruption being now apprehended, he was adviſed to go into the air, and to take the infuſion of manna and ſenna, which operated freely, and all his complaints abated.

But about this time a freſh eruption made it's appearance, of at leaſt double the former quantity, and he continued free from every complaint; both the firſt and laſt ſet of puſtules maturating favourably, and what may appear extraordinary, ripening nearly about the ſame time; for the former crop ſeemed retarded by the ſecond eruption, and the latter advanced more rapidly than uſual.

CASE VIII.

The like.

A Man, aged forty-four, began to complain of pains in his head and back, and of extreme cold, on the ſixth day after inoculation; theſe complaints continued with ſuch ſeverity, that he was adviſed to take the alterative pill and purging draught, and to keep much abroad till the ninth; when, upon the appearance of about ten puſtules, his indiſpoſition ceaſed, and this little eruption ſeemed diſpoſed to go off without maturation, as ſometimes happens where there are ſo few puſtules.

On the twelfth, he took purging phyſic, and though his arms ſtill remained much inflamed, he removed to ſome diſtance from the place where he had been inoculated, and ſoon after his removal he became again much indiſpoſed.

On the fourteenth day from inoculation freſh puſtules began to appear, which had increaſed in number by the ſeventeenth day to about the number of forty in his face alone, which maturated and went off in the uſual way: but during the whole time his arm continued much inflamed, with ſeveral puſtules near the inciſion.

CASE IX.

Of the Natural Small-Pox, treated according to the modern Method preſcribed for Perſons under Inoculation.

ON the twenty-ſecond of the month, a poor man was ſeized with a ſhivering fit, which was then ſuppoſed to be the attack of an ague: ſoon after he became extremely hot, and complained of violent pains in the head, back, and loins, which continued till the twenty-fourth, and during which time he kept his bed.

His pulſe was now extremely quick, the heat great, and the pains in his loins ſevere; and there was at this time but little doubt that theſe ſymptoms indicated the approach of the ſmall-pox, which prevailed much in the neighbourhood.

Though on other occaſions a man of reſolution, he was now with great difficulty perſuaded to quit his bed, declaring he was apprehenſive he ſhould not be able to ſupport himſelf; he however collected his ſpirits and ſtrength, got into the air, and with aſſiſtance, reached a bench at the diſtance of an hundred yards from his own habitation: here he complained of great weakneſs and violent pains in his loins, the acuteneſs of which he deſcribed, by ſaying, he felt as if he was cutting in two; but he admitted that the air had relieved his head.

A pill, containing ſix grains of calomel, and one eighth part of a grain of emetic tartar was immediately adminiſtered; and, as he complained much of thirſt, he was permitted to drink half a pint of cold water after the pill, but was adviſed to keep moving, which he attempted, though with extreme pain.

After continuing in the air ſomewhat longer than a quarter of an hour, the pain of his head abated, but that of the back and loins continued as before: his pulſe had undergone a conſiderable change; for inſtead of being full and ſtrong, it was now rather low and quick, and the heat on his ſkin much abated.

All this happened from ten to eleven in the forenoon; and the patient ſeeming greatly fatigued, he was permitted to return to his houſe to refreſh himſelf; but was deſired not to go into bed, or to take off his cloaths.

About two o'clock of the ſame day, the pill had procured two ſtools; the patient got into the air again: but this was a voluntary effort; for he found himſelf relieved from the head-ach as ſoon as he got out, and perceived the return of it as ſoon as he came into the houſe. Towards the evening the pains in his back and loins decreaſed, and about ſeven he was permitted to go into the bed. He reſted but little, and on the twenty-fifth his complaints continued much the ſame as the preceding evening; only that his pulſe was higher, and the heat rather greater: ſome few puſtules of a ſmall ſize now began to appear, and he was directed to take a purging draught of manna, infuſion of ſenna and jalap, and adviſed to get up and venture into the air again; this he complied with, and by two o'clock his phyſic had operated three times, and he found himſelf more free from pains in his loins and back; more puſtules now appeared in his face, but very few on his limbs.

From his firſt ſeizure he had only ſwallowed diluting liquors; ſuch as tea and milk, and herb teas; loathing all kinds of more ſubſtantial food. He kept abroad the greateſt part of the afternoon, and towards the evening his pulſe grew more calm and regular, his pains abated, and he found himſelf diſpoſed to take ſome nouriſhment: at ſeven he went to bed.

This night he ſlept but little, had one purging ſtool; and in the morning of the twenty-ſixth felt himſelf languid and low, but his pulſe was full, even, and regular, and he had no great degree of heat: many more puſtules now appeared in his face, but ſtill a few only on his limbs; the pains in his head and loins went off, he eat milk pottage with ſome appetite, and kept in the air the greater part of the day.

In the afternoon he lay down on the bed and fell aſleep, but ſoon after waked almoſt choaked with blood, which he vomited up, though it was apparent he had ſwallowed it, as his noſe was bleeding; the whole quantity did not ſeem to exceed ſix or eight ounces; but he complained of being faint, yet he ſaid his complaints were removed. He was now ordered to drink the pectoral decoction, with equal quantities of ſweet and weak ſpirit of vitriol, and the eruption proceeded ſlowly in his face, and on other parts of his body: towards the evening he had two more purging ſtools, complained of being very faint and low, and ſeemed apprehenſive he ſhould not reſt.

An anodyne was now thought neceſſary, and he was ordered to take three drams of mithridate, with which he paſſed a comfortable night, had refreſhing ſleep, and in the morning found himſelf quite eaſy.

The eruption was now compleat; his face was rather full, but the puſtules were diſtinct; on the reſt of his body they were fewer in number, and of large ſize; and from this time he went through the diſeaſe without danger or difficulty.

CASE X.

The like.

A Young woman being ſeized with the uſual ſymptoms of a fever, and ſome eruption appearing on the third day, the diſorder was apprehended to be an inflammatory fever and a raſh; and as ſhe grew extremely delirious, a bliſter was applied: about this time it was diſcovered that ſhe had the ſmall-pox; her face was full of very ſmall puſtules, and a conſiderable quantity appeared on her neck and limbs; but the fever ran very high, attended with extreme heat, and ſhe was ſo delirious as to diſcover few other ſigns of reaſon, than repeated complaints of pains in her loins, ſtomach, and head.

Circumſtances attending her ſituation, made it abſolutely neceſſary to remove her; and hazardous as the attempt might appear, it rather concurred with a deſign then formed of trying how far the methods ſo happily purſued in inoculated caſes would ſucceed in this, where it was evident the ſmall-pox would be of the confluent ſort, and from the violence of the ſymptoms, extremely probable that the diſeaſe would prove dangerous.

She was, therefore, immediately taken out of bed and dreſſed, being then delirious and totally incapable of helping herſelf, brought down ſtairs by three perſons, and placed in a chair, where ſhe was ſupported, being from extreme weakneſs unable to hold herſelf up.

The fatigue attending this motion, and the change of poſture, brought on a faintneſs, ſhe loſt her colour, and the puſtules diſappeared.

It was now thought right to bring down the bed and place it on the floor, and the patient was laid upon it with her cloaths on: being offered a glaſs of cold water, ſhe drank it eagerly, and ſoon after her colour returned; the puſtules re-aſſumed their former appearance, but ſhe grew more cool; her pulſe, though ſtill quick, was leſs ſtrong; her reaſon began to return in about half an hour, her reſtleſſneſs abated, but ſhe ſeemed tired and low; the window was ordered to be open, and the room to be kept cool, and a pill of three grains of calomel and one eighth part of a grain of emetic tartar was immediately adminiſtered, and a purging draught as ſoon after as it could be conveniently procured. The bliſter was taken off as unneceſſary.

In the evening ſhe was removed to a houſe at a ſmall diſtance, where ſhe reſted tolerably; and after the operation of the medicines, which gave her three ſtools, ſhe became perfectly ſenſible, and comparatively free from complaints.

She had, however, the confluent ſmall-pox, and was extremely full all over her body, but the inflammation and maturation were regular and favourable; and it was diſcernable, that under this management ſome of the puſtules in the face were actually repelled, the numbers appearing in the progreſs of the diſeaſe to be leſs than at the eruption.

CASE XI.

The like.

IN the beginning of the month of June, a young woman was attacked with the uſual ſymptoms of the ſmall-pox, ſuch as ſhivering, heats, fever, and pains in the limbs, loins, and head, all in a very violent degree, and attended with ſuch a general weakneſs, that ſhe was obliged to take her bed within a few hours after the firſt ſeizure, where ſhe very ſoon became delirious, and ſhortly after ſo inſenſible as that her urine went off involuntarily. And in this ſtate ſhe remained till about forty hours after ſhe was firſt taken ill, when her pulſe was extremely quick, but not ſtrong, the heat exceſſive, and a few ſmall eruptions appearing on the face, ſufficient however to aſcertain the nature of her diſorder: being attempted to be raiſed, ſhe made no effort to ſupport herſelf, and was therefore permitted to lie down again, and the room being ſmall, the window was thrown open; five grains of calomel were got down with great difficulty, and the infuſion of ſenna and manna was prepared, and the attendant deſired to give the patient a ſmall quantity at a time till it procured a ſtool.

It was neceſſary that ſhe ſhould be removed out of the houſe where ſhe fell ſick, yet in her preſent condition it was impoſſible, and ſhe remained where ſhe was, and continued in the ſame ſenſeleſs way the whole night; but in the morning ſhe grew better, ſpoke more reaſonably, had two ſtools, and threw up a quantity of bilious matter by vomit.

This was the third day of her illneſs, and the heat was ſtill great, the pulſe quick, and many puſtules, apparently confluent, ſhewed themſelves as well on other parts of the body as the face. She was now taken out of bed, and the window kept open; but it was yet doubtful whether ſhe had ſtrength enough to bear being expoſed to the open air.

In the evening, however, her complaints being conſiderably abated, and the eruption much increaſed, ſhe was removed to a houſe in the neighbourhood, and again took three grains of calomel, and one eighth of a grain of emetic tartar.

This night ſhe took ſome reſt; but as the fever continued, and ſhe had no more ſtools, ſhe was directed to repeat the uſe of the infuſion of ſenna and manna, which gave her three ſtools before night, when all her complaints abated, though ſhe was full all over her body of a very confluent kind of ſmall-pox.

She ſoon after became quite blind, notwithſtanding which ſhe ſat up by her own choice the greateſt part of ſeveral days, and went through the diſeaſe with uncommon eaſe conſidering the very large quantity of eruption, ſeldom making any other complaint than of ſoreneſs, or taking any other medicine than a gentle opiate towards the criſis.

CASE XII.

In ſupport of the Opinion, that ſome Conſtitutions are ſo framed as not to be liable to the Small-Pox.

THE parents of three children, one of whom had died of the confluent ſmall-pox, and a ſecond dangerouſly ill of the ſame diſeaſe, requeſted that the third might be inoculated, as a chance for preſerving it's life.

Under the conviction that ſuch a meaſure would be productive of no ill conſequences, though the child ſhould have then taken the natural infection, of which there was the ſtrongeſt probability, as the whole family were in one room, the requeſt of the parents was complied with, though from the circumſtances little hope could be entertained of ſucceſs, as the child might be expected to fall ill every moment. The infection was accordingly communicated from the virulent matter of the other, which died very ſoon after, but not the leaſt marks of infection could be obſerved to follow the inoculation, either in the appearance of the arms, or in any conſequent indiſpoſition, though ſtrictly and attentively obſerved; but the child continued in perfect health from this time, which was about Chriſtmas, till the following May, when it was propoſed to take the child to a patient then full of the natural ſmall pox, and near the criſis; this was accordingly done, and it was inoculated again with fluid matter, and even ſuffered to touch the ſick perſon; but theſe experiments produced no more effect than the former inoculation, and the child remained perfectly well.

CASE XIII.

The like.

A Whole family were inoculated at the ſame time, and all except one child ſickened at the uſual diſtance from the operation, with the common ſymptoms, and all went through the ſmall-pox in a very favourable way; but no marks of infection appearing on this one child, even at the places of inſertion, it was inoculated again, continuing the whole time in the ſame apartment with thoſe who had the diſeaſe; but this inoculation had no more effect than the former, nor produced the ſmalleſt ſymptom of illneſs.

At the diſtance of ſeveral months the operation was repeated a third time with as little ſucceſs as before, and the child was frequently afterwards expoſed to natural infection, but remained perfectly free from the diſtemper.

BOOK

BOOK I.

Of the natural Paſſions and Affections, and of the ordinary Functions, Avocations, and Employments of Life, as they are ſuppoſed to affect bodily Health.

CHAP. I.

Of the Paſſions of Love, Anger, Grief, Joy, and Fear.

BEFORE we ſpeak of the diſorders incident to grown perſons, and to which they are more liable than to thoſe of which we have already treated, it may not be improper to conſider in what caſes the paſſions of the human mind influence the diſpoſition of the body, and how far the ordinary functions, avocations, and employments of life, affect health, conſtitution, and ſtrength.

How the paſſion of *love* can be conceived to affect the health of the human body, is a queſtion more eaſily anſwered by inſtance than argument; daily examples furniſh us with melancholy proofs of the moſt vigorous conſtitutions deſtroyed, and the faireſt ſtructures of health overturned, by an exceſs of the moſt amiable paſſion which acts upon the human mind.

Though the buſineſs before us is to ſpeak of the effects, and not to define the cauſes of the paſſions; yet, perhaps, a little attention beſtowed on the one, may enable us to perform the other with the more preciſion and perſpicuity.

The paſſion of love, in it's pure and genuine ſenſe, we underſtand to be a deſire of receiving and communicating happineſs, and directed to a particular object, under an idea, that from a conformity of mental or corporeal endowments or qualifications, an union may be formed productive of this happy effect.

Nor ſhall we be induced to alter our opinion of the ground-work and foundation of this paſſion, by being told, that we frequently find deformity, in the garb of love, purſuing beauty; age on the ſame road after youth; and virtue impatient to join hands with vice and wickedneſs: for all theſe ſeeming incongruities may be reconciled, by reflecting, that we have not deſcribed the depraved, but the genuine paſſion of love; and that the moſt amiable of all paſſions, and the moſt laudable of all purſuits, are alike capable of being perverted to abſurdity, and of degenerating into folly.

Allow us then to adhere to our definition, and we ſhall ſoon diſcover how poſſible it is, that a paſſion ſo noble, innocent, and pleaſing, may yet prove as injurious to health, as it is too often deſtructive to happineſs.

No arguments are neceſſary to prove, that minds, diſpoſitions, and inclinations, are under no reſtrictions or regulations of rank, fortune, or circumſtance: congenial ſouls may take fire at the pure lamp of love, and burn during the exiſtence of a vital ſpark; nor is the flame extinguiſhable by the mandates of authority, the interference of advice, or the dark letter of human law.

Hence, corroding care, oppreſſive melancholy, unavailing complaint, and all the health-impairing attendants of hopeleſs love; and hence loſs of appetite, diſturbed reſt, hypochondriac diſorders, and too often conſumptions, to end the ſad cataſtrophe.

On every ſuch occaſion medical aſſiſtance is vain; diſeaſes of the heart admit but of one ſpecies of cure, and the ſpecific is in the hands of parents, guardians, and friends.

Almoſt every preſcription of phyſic or regimen is accompanied with ſuitable directions for management, addreſſed as well to the patient himſelf, as to his attendants and friends; among the reſt, the regulation of the paſſions is conſtantly recommended, and indulgence of anger, grief, joy, or fear, expreſsly forbid, as tending to leſſen the effect and counteract the operation of medicine, to augment the dangers of diſeaſe, and increaſe the difficulties of cure.

But I apprehend, it will hardly be contended that the human mind, under the immediate influence of any one of thoſe paſſions, is but little attentive to the dictates of Reaſon; and that the moment it becomes calm enough to liſten to her voice, advice ceaſes to be neceſſary.

To ſubdue the violence of *anger*, is the duty of a Chriſtian; to moderate *grief*, and reſtrain *joy*, the work of a philoſopher; and to obviate the impulſe of *fear*, improperly denominated a paſſion, is a taſk only to be performed by a repeated and conſtant expoſure to the effects of this percuſſion; which, like leading up a horſe to the ranks, may blunt the edge of apprehenſion, and produce a kind of mechanic reſolution.

But notwithſtanding the difficulties that occur in our attempts to reſtrain thoſe headſtrong arbiters of our fate, yet the fatal conſequences which attend the ſuffering them to reign uncontrouled, cannot be too pathetically deſcribed, or too often inculcated: to overcome the prevalencies of human nature may amount almoſt to an impoſſibility; but to leſſen their violence, and curb their irregularities, is equally our intereſt and our duty.

Would the *angry man* ſuffer himſelf, in the lucid intervals of rage, to reflect that fevers and inflammations are the certain effects of haſtening the circulation of the blood; that burſts of paſſion do not unfrequently occaſion ſudden death; and that all the functions of life are obſtructed by an exceſs which has not even the excuſe of momentary pleaſure; he would voluntarily bridle his impetuoſity, nor ſuffer himſelf to be the victim of his own indiſcretion.

If the man of *reſentment* would recollect, that diſeaſe and choler breed together; that the brooding cares of unſatisfied revenge prey on the conſtitution, and with the flow but ſure effect of poiſon, occaſion the moſt obſtinate, though perhaps not the moſt immediate diſorders; if he would teach himſelf to believe, that forgiveneſs of injuries is the ſevereſt puniſhment he can inflict upon his enemy, becauſe it adds to the enjoyment of his own comforts, contributes to the bleſſing of health in this world, and enſures his happineſs in the next; he would practiſe only the divine doctrines of retaliation, and preſerve his body in undiſturbed ſecurity, and his mind in unruffled tranquillity.

But, reſpecting theſe paſſions of anger and reſentment, ſome cautions are neceſſary to be directed to another quarter. When the body is worn down by diſeaſe, the mind ſeldom retains it's vigour; the acute ſenſations of continued pain naturally produce reſtleſſneſs, peeviſhneſs, and diſſatisfaction; and it ſhould be the care of the friends and attendants of the ſick, to ſoften the rigours of diſtemper by ſoothing the anxieties which are occaſioned by it, to hide in the progreſs of illneſs poſſible danger, to lighten in repreſentation the pains of neceſſary operations, to avoid every ſpecies of contradiction, and to conſult the eaſe and quiet of the patient's mind, as ingredients abſolutely neceſſary to promote the ſucceſs of medicine.

But if anger and reſentment are ſubverſive of health, how much more fatal are the effects of *grief*: the ebullitions of anger, and the gratifications of revenge, procure at leaſt temporary relief; but the effect of grief is uninterrupted, nay, it acquires ſtrength from duration; it's impreſſions are made more laſting by reflection, and the means generally employed to turn it's keen edge, anſwer little other purpoſe than to convert it into fixed melancholy—the wretched harbinger of the whole train of nervous complaints, and too often of the conſummate of human misfortunes, the deprivation of thoſe faculties which diſtinguiſh the human race among the works of God.

In vain are we told that misfortune is the lot of mortals; in vain are we taught that we ought to bear the common ills of life with ſerenity, and ſubmit to the diſpenſations of Providence with reſignation: we admire the precept, but look for the example, and diſcover in the conduct of the preacher himſelf, that leſſons applied to the human paſſions are admirably calculated to inſtruct the by-ſtander, but are wholly inefficacious to relieve the diſtreſſes of the afflicted, or to convey peace to the children of woe.

Yet are we not to permit the mourner to ſink under the weight of his calamities, without ſome attempt to remove the preſſure of miſery, or alleviate the burden of wretchedneſs.

In the firſt attacks of affliction, ſeek not to ſtem the torrent; let ſorrow have it's courſe, and ſoothe the mind rather with participating the cauſe, than by endeavouring to prevent the effect. In the violent perturbations of anguiſh, nothing tends ſo much to quiet the ſpirits, as an apparent diviſion and communication of misfortune: a ſurviving parent, overwhelmed with the loſs of a beloved and affectionate partner, hath often been brought back to reaſon and reſignation, by the embraces and tears of a darling child, when arguments of religion have been fruitleſs, and the efforts of condolence unavailing.

When the tumult of paſſion ſubſides, when nature, tired with the conflict, ſurrenders the ſufferer to the neceſſary though unwelcome approach of ſleep, watch the moment of waking with the moſt friendly attention; obſerve the change wrought by this ſuſpenſion of ſorrow, and guard againſt the violent return of it, by introducing intereſting ſubjects, and awaking the mind to the avocations of buſineſs, parental duties, or offices of humanity, to which it is in ſuch moments peculiarly diſpoſed. Having ſucceeded in diverting the ſtream, the difficulty of drying it up will be leſſened: from buſineſs, proceed to amuſement; engage the faculties in conſtant employment; and as the object of grief preſents itſelf leſs frequently, the effect will be leſs ſeverely felt, till it's poignancy be ſoftened to regret, and the recollection produce ſenſations of melancholy pleaſure.

But when grief does not ariſe from any immediate ſtroke; when it is occaſioned only by diſappointment, and an untoward combination of the common occurrences of life; we muſt ourſelves exerciſe the reaſon with which we are endowed: ſince to yield to ſuch calamities, is to arraign the diſpenſations of Heaven, and repine at being ſubject to the ordinary accidents of mortality.

The effects of grief will ſoon become viſible on the ſtrongeſt conſtitution; loſs of reſt is ſucceeded by loſs of appetite, the neceſſary conſequence of which is indigeſtive flatulencies, depreſſion of ſpirits, relaxation, conſtant pains in the head and ſide, and ſlow or intermitting fevers: yet theſe are but the diſtant conſequences; the firſt and more violent impreſſions occaſion frenzy, ſuffocation, lethargy, and death.

To obviate the deplorable effects laſt mentioned, we have already offered the beſt directions which occur to us: to remove the canker when it is ſlowly, and almoſt imperceptibly gnawing it's way to the heart, change of air, and of ſituation, objects and employments, are the beſt remedies that can be recommended. Where the condition of life prevents our ſeeking the cure by theſe means, others muſt be ſubſtituted; the attainment of any particular kind of knowledge, the acquirement of excellency in arts, ſcience, or mechanics, may be ſuggeſted; and when the attention once begins to fix on a new object, it will naturally draw off from the old, the mind will collect itſelf, and exerciſe it's powers in eager purſuit of the pleaſure which it expects to derive from this untaſted ſource, and will ſoon reſume it's vigour, and expel the diſagreeable and dangerous intruder.

But when grief has been ſuffered to prey too long, when it has been too deeply rooted to be diſpoſſeſſed by the charms of variety, or the common expedients of travelling, amuſements, and company; the efforts of argument have been ſometimes uſed with ſucceſs: and compariſon with others ſuffering with fortitude the ſame ſpecies of calamity in a more eminent degree, has in ſome inſtances been known to excite emulation, and lift the deſponding victim from the regions of deſpair, to thoſe of expectation, hope, and reliance.

Nor ſhould the duties of religion be omitted; a due application to which will diſpoſe the mind to ſubmit without murmuring to the ordinary decrees of Providence: but let it always be remembered, that chearfulneſs is the reſult of perfect reſignation, and that a melancholy and broken heart, muſt be a very unacceptable ſacrifice to that God, who animates univerſal nature with the light of his countenance, *who maketh the mountains to rejoice, and the vallies to laugh and ſing.*

The chriſtian religion is of all others beſt calculated to ſupport us under the various afflictions of life; the great example before us, ſhould inſpire our ſouls with reſolution to combat the evils allotted to us here, that we may have fit diſpoſitions to participate in thoſe joys, which, if we chuſe to entitle ourſelves to them, are prepared for us hereafter.

The effects of *joy*, though by no means ſo common, are not leſs dangerous than thoſe of grief; whatever acts upon the mind with a ſudden and violent impulſe, operates like anger, in promoting an improperly haſty circulation of the blood, and producing all ſorts of inflammatory diſorders; nay, the immediate conſequences have been very often fatal, not only to the ſenſes, but even to life itſelf: and we recollect an inſtance of a woman in child-birth, who being informed that her huſband had ſucceeded to a fortune as immenſe as it was unexpected, fell at once into a ſtate of inſenſibility, from which ſhe awoke in a high fever, accompanied with delirium, which at the end of three days put a period to her exiſtence.

When, therefore, the acceſſion of fortune, or any other unforeſeen event, elates the mind to an extraordinary degree of pleaſure, it will be neceſſary to direct the courſe of joy to proper objects; to repreſent the mercy of God, as the only fountain from whence our bleſſings flow; and to excite a due degree of thankfulneſs to the Author of our happineſs, and a proper communication of the gifts we have received to thoſe around us.

Why *fear* ſhould be treated as a natural paſſion, we confeſs ourſelves wholly unable to diſcover; a ſenſe of danger, and an earneſt deſire to avoid it, no more deſcribe the ſenſations of fear, than paint on the cheek denotes a fever, or a glove characteriſes the colour of the ſkin.

Fear ariſes from ſome impreſſion made

upon the mind by exterior objects, and is either begot by repreſentation, apprehenſion, or actual ſuffering. The Wild Man, found many years ago in the woods of Germany, thruſt his hands into the firſt fire that was ſhewn him, without the leaſt notion of it's being hurtful; but he felt the ſmart, and carried the remembrance of it to his grave, in an averſion to that element. The Indian ſurveys a gun with pleaſure, examines it's parts with curious attention, ſeems delighted with the ſmoothneſs of the barrel, and the mechaniſm of the lock; he pulls the trigger, is ſeized with horror at the exploſion, drops the inſtrument of terror at his feet, and flies for ſhelter to his native foreſts. He who has never heard of the deleterious effects of the ſmall-pox, feels no apprehenſions of being attacked by the diſeaſe; whilſt he who has had the loathſome progreſs of it painted in deſcription, and the melancholy conſequences pointed out in example, ſhudders at it's approach, and overwhelmed with fear and anxiety, ſinks under the diſorder, which perhaps is alone rendered dangerous by the diſpoſition of the patient's mind.

If we diveſt the impulſe of fear of the character it has hitherto received, and inſtead of conſidering it to be an inſtinctive and natural paſſion, attribute it to cauſes induced by circumſtances, and evident to our ſenſes, we ſhall feel ourſelves much leſs at a loſs to obviate or prevent dangerous impreſſions, and to remove the effects, which are often of a very alarming nature.

From infancy, a moſt nefarious cuſtom prevails, of ſubjecting the tender mind to the influence of terror: the crying child is quieted by the threats of calling bugaboo, or bloody-bones; in the advances to youth, tales of ghoſts, ſprites, and hobgoblins, are continually introduced; and the mind thus early habituated to fearfulneſs, ſcarce ever gets over the fatal tendency.

The abſurd pleaſantry, ſo commonly practiſed among young people, of frightening each other by fantaſtic dreſſes, ghaſtly maſks, and other devices of the like kind, is often attended with conſequences of ſo ſerious a nature, that if they were at all noticed, jokes of this ſort would be much leſs frequent; inſtances can be found of ſome perſons loſing their lives, and many their ſenſes, by this ſpecies of miſchievous wit.

Tales of horror are the common entertainments of a ſick room. Is a woman in child-birth—every ſtory of hard labours, conſequential diſorders, and unnatural births, is induſtriouſly recollected, and recounted with all the accompaniments of woe, and expreſſions of pity. Is the patient feveriſh—delirium, frenzy, and every aggravating ſymptom, are the uſual topics of converſation; nor can we altogether acquit the phyſician himſelf of contributing to the prevalency of this unnatural cuſtom, when by ſhrugs, and nods, and winks, he denounces his apprehenſions of danger, and meaning only to convey reaſonable doubt and anxiety, is underſtood by the ſick man to pronounce a ſentence of death, which his own fears too often carry into actual execution.

Sudden fear produces violent effects: epilepſies and convulſions are frequently occaſioned by it; and many a noble fabrick of health hath been deſtroyed in a moment, by a falſe alarm, an unfounded tale, or a ridiculous and miſerable attempt at mirth and humour.

But where it fails to act with ſuch immediate violence, the impreſſions may be equally injurious, and are in general laſting; the nervous ſyſtem once affected is hardly ever perfectly reſtored, and hyſteric, hypochondriac, and melancholy, are the wretched companions for life, of thoſe who eſcape the more ſuddenly fatal conſequences.

To avert the certain dangers which await the impreſſions of fear, baniſh from the nurſery and the ſchool-houſe the idle fictions of ſupernatural appearances; and from the ſick-room the unmeaning tattle of ſimilar caſes and melancholy events. Let children be taught, that the only real cauſe of fear originates in vice, and that virtue will recommend them to the care of that Being, without whoſe permiſſion no evil can befal them. Let the dangers of particular diſorders ceaſe to be the ſubject of ordinary converſation before thoſe who are peculiarly liable to their attacks; and let the buſineſs of the ſick-room be confined to proper attendance on the convaleſcent, and a due regard to the caſe before us, without adverting to others, for no other purpoſe than to harraſs a mind already brought low by indiſpoſition, and to add to the miſeries of diſeaſe, apprehenſions of a fatal cataſtrophe.

CHAP. II.

Of different Avocations and Employments.

THE avocations and employments of life may be divided into the *ſedentary* and the *laborious*; among the former may be claſſed ſtudy, all the fine arts, many branches of mechanics, and every common buſineſs which is performed by the hands in one particular ſpot.

Among the latter, agriculture, other branches of the mechanics, and engagements in the public, military, or naval ſervice.

A cloſe and intenſe application to ſtudy, a fixed and conſtant habit of thinking, and a perpetual ſtrain of the faculties of the mind, is equally deſtructive of the health, and ſubverſive of the underſtanding. To the monk of ſome auſtere order in his cell, ſtudy may be relaxation; but for the man of the world, for him who has engagements of a ſocial and domeſtic nature, to dedicate his whole time to literature or ſcience, is to pervert the deſigns of Providence, and to advance works of doubtful or ſpeculative uſe, at the expence of health, comfort, and the active duties which he owes to the ſociety at large, and to his family in particular.

Not that we would be underſtood to diſcourage the advances of learning, or the diſcoveries and improvements of ſcience; on the contrary, we are of opinion, that every man whoſe rank and ſituation in life have given him the advantage of education, may with equal benefit to himſelf and the community, employ a portion of his time in thoſe delightful avocations, and contribute to the volume of literature, without injury to his health, or prejudice to his fortune.

When we conſider that the vital motions of the body are under the influence of the mind, and are either haſtened or retarded by it's immediate diſpoſition, we ſhall be at no loſs to conceive, that the chearfulneſs and ſprightlineſs of the one, will add to the vigour and activity of the other; and that a dull, phlegmatic, and unhealthy body, is a fit receptacle for a plodding, ruminating, and gloomy ſoul.

But the common and conſtant effects of exceſſive application to ſtudy, are indigeſtion, loſs of reſt, diſorders in the liver; from thence jaundice, loſs of appetite, and conſumptions; ſtone, gravel, apoplexies, palſies, nervous and hypochondriac complaints, and melancholy.

Reading or writing by night, without due precaution, occaſions ſore and weak eyes, accompanied with defluxions and violent head-achs.

Stooping to a deſk or table throws the contents of the ſtomach and bowels forward, obſtructs reſpiration, and produces inflammations of the lungs and cholic, and other inteſtinal diſorders; and leaning againſt the breaſt injures the functions of the heart, obſtructs it's motions, and is attended with the moſt fatal conſequences.

To ſuch whoſe inclinations only lead them to ſtudious employments, and who are by fortune and circumſtances in life enabled to arrange and intermix their ſedentary and active engagements, few cautions are neceſſary; they will fly from men to books, and from books to men, the moment either becomes tireſome; and their choice of correſpondence with the living or the dead, will effectually ſecure them from ſuffering their health to be injured by the one, or their morals corrupted by the other.

But where ſtudy is the buſineſs of life, and literary employments are works of actual neceſſity, and a large proportion of time muſt be devoted to the purſuits of the mind, rules may be laid down, and certain regulations eſtabliſhed, which may tend in a great meaſure to obviate the evils, and leſſen the dangers, which will unavoidably attend a courſe of conſtant and uninterrupted ſtudy.

Let a part of every morning be ſpent in riding, walking, or in ſome other exerciſe in the open air. Break off your ſtudies every ſecond hour at leaſt, and unbend your mind, if but for a few minutes, with converſation, family concerns, parental or other domeſtic offices, or muſic; go into mixed, nay, rather than fail, into trifling company, for ſome part of every day or evening; avoid returning to your book or pen immediately after a meal, and if you read or write by night, uſe a ſhade or ſpectacles, and place your candles at ſome diſtance from your book or paper.

Fix on a place of ſtudy as airy and lightſome as poſſible, and vary your poſture frequently: if you read, you may ſometimes walk with your book in your hand; if you are engaged in writing, move occaſionally to the oppoſite ſide of your table or deſk, and accuſtom yourſelf to write either ſitting or ſtanding; the latter poſture is leaſt injurious.

Some regard alſo is due to the food and drink of the ſtudious; meats hard of digeſtion, ſour, windy, or highly ſpiced, ſhould be avoided; the ſuppers ſhould be light and early, and the liquors ſuch as are well concocted; and where the ſtomach will bear them, acids in moderate quantities are of peculiar ſervice.

By attention to theſe eaſy and practicable rules, the labours of the mind may be prevented from being deſtructive to the health of the body; and he whoſe life is devoted to the exerciſe of genius, may reap the fruits of it without being deprived of all the comforts which are worth his attainment.

The fine arts, ſuch as painting, ſculpture, and engraving, are properly ſedentary employments; the exerciſe is confined to the hands, and the mind is actually engaged more than the body. Watch and clockmakers, chaſers, and a variety of other ingenious mechanics, come alſo within the deſcription of ſedentary perſons; and the ſame regulations and advice may be applied to them, which has already been offered to thoſe employed in the ſtudies of ſcience and literature.

But there are other mechanics, of a lower claſs, who depend on the labour of their hands for the means of exiſtence; and the profits of whoſe trades are ſo very inconſiderable, as to render it abſolutely neceſſary for them to employ every hour of the time, which is not actually required for the ordinary refreſhments of eating and ſleep, in unremitting attention to the duties of their reſpective callings.

Yet the dangers attending perſons even in this ſituation may be averted, and the fatal conſequences of a life of inactivity may be rendered leſs terrible, by availing ourſelves of ſuch means as offer to obviate the want of more frequent exerciſe, to promote a regular circulation of the blood, and to procure a conſtant ſupply of freſh, or at leaſt more wholeſome air, than ſuch mechanics are uſually accuſtomed to breathe.

For theſe purpoſes we ſhall earneſtly recommend cleanlineſs, as in ſome meaſure an efficacious ſubſtitute for exerciſe; let the induſtrious, but ſedentary mechanic, accuſtom himſelf to waſh not only his face and hands, but his head, neck, and behind his ears, with clean and cold water, every morning, before he betakes himſelf to his occupation; let him ſet open the windows, and even doors of his room, as often, and for as long time, as the ſeaſon will admit; let him avoid an abſurd cuſtom of crouding his windows with garden-pots of herbs and plants, to the excluſion of air, and the introduction of unnatural damps; let him take his meals ſtanding, or walking about; and if, to a ſtrict obſervance of theſe rules, he will add an evening walk of an hour, inſtead of ſpending that time at an alehouſe, he may enſure to himſelf a tolerable ſhare of health and vigour, and may purſue his employment cloſely, without incurring the danger of being incapacitated by diſeaſes, or the premature approaches of the infirmities of old age.

In the exerciſe of ſome particular trades, convenience has made it neceſſary to confine a number of artificers to work in the ſame room, where they repeatedly breathe the ſame air, waſted and vitiated alſo by the addition of a number of candles, for many hours together; and then ruſh at once into the cold, perhaps damp air of the night, when their bodies are actually fitted to receive infection, and diſpoſed for fevers, and other inflammatory diſorders.

To break through a cuſtom, which though pregnant with miſchief, is yet attended with circumſtances of conſiderable advantage to the employer, and is alſo in ſome meaſure pleaſant and agreeable to the mechanic himſelf, may be a matter of ſome difficulty; but the bad effects of this uſage may be in a certain degree prevented, by placing a funnel of tin in the middle of the room, with an outlet to the open air, and diſpoſing the candles around it, in ſuch a way as to permit a conſiderable portion of the foul air to paſs off; and thus a ventilator may be procured of very ſimple conſtruction, and at a trifling expence, to purify the room by night: by day, throwing open the doors and windows will anſwer the ſame purpoſe.

The poſture in which taylors, ſtaymakers, furriers, and ſome other artificers, ſit to work, with the legs cramped up under the hams, is extremely prejudicial to health, obſtructs the circulation of thoſe parts, renders them weak and feeble, and frequently occaſions a total loſs of the uſe of the limbs; and the preſſure on the bowels by a continual bending figure of body, brings on cholic and flatulencies, and often produces an habitual coſtiveneſs, at all times diſagreeable, and in many inſtances extremely dangerous.

Whether ſuch unnatural and conſtrained poſtures are abſolutely requiſite to the performance of the neceſſary buſineſs of theſe particular artificers or not, we are unable to determine; but we are inclined to believe, that a great part of their labour might be compleated in a ſituation more comfortable and leſs injurious to health.

There are alſo certain occupations, which are in themſelves extremely prejudicial to health; painters, miners, plumbers, tallow-chandlers, chymiſts, founders, glaſs-grinders, and ſeveral other artiſts, are hurt by breathing unwholeſome air, ſo loaded with noxious and poiſonous exhalations as to be rendered unfit to anſwer the great purpoſes of reſpiration; and perſons who follow theſe employments, are peculiarly liable to aſthmas, coughs, and other complaints of the lungs; and to palſies, vertigoes, and a variety of nervous diſorders, which frequently prove fatal in the very early periods of manhood.

To prevent as much as poſſible ſuch melancholy conſequences, every exertion ſhould be made, and the utmoſt pains taken, to diſcharge the ſmoke, ſtench, exhalations, and fumes, and to admit a conſtant change of freſh air in places appropriated to the exerciſe of ſuch trades; the labouring artificer ſhould work but a few hours at a time, put on his cloaths the moment he diſcontinues his employment, and by no means go into the open air till he is cooled. He ſhould avoid drinking cold water, or other weak liquors whilſt his body is heated by violent exerciſe; nor ſhould he eat fruits, or raw vegetables, which may be cold on his ſtomach.

By way of preventive medicine, a piece of rhubarb chewed now and then, or a table ſpoonful of ſweet oil taken in the morning, will be found extremely uſeful; and thoſe who work on metals or minerals, ſhould waſh ſuch parts of their ſkin as are expoſed, and change their cloaths before they eat.

Thoſe who follow the employments of huſbandry, are in general healthy; at leaſt, they are leſs liable to particular diſorders than thoſe who are confined within doors and in certain poſitions, and are ſubject to the inconveniences ariſing from putrid air and offenſive effluvia.

Yet even the occupations of agriculture, the places where they are carried on, and the neceſſity of their being purſued, without regard to the ſeverity of the ſeaſon, or the inclemency of the weather, expoſe even the huſbandman to the complaints incident to heat, cold, and wet, and occaſion fevers, agues, quinſies, and rheumatiſms; beſides that continued hard labour, violent exertions of ſtrength, and the carrying heavy burdens, overſtraining the veſſels, bring on aſthmas, ruptures, and univerſal debility.

There are alſo other dangers to which men of this condition are apt from careleſſneſs or obſtinacy to expoſe themſelves; ſuch as ſitting or lying on the damp ground during the time they are in violent perſpiration from labour: ſleeping in the ſun alſo, inſtead of procuring the refreſhment ſought after, is productive of fevers, and all other inflammatory diſorders. The receſs from labour, which is a neceſſary indulgence in the extreme heat of the day, ſhould always be enjoyed within doors, or under the ſhelter of ſome cover, which may protect the labourer both from the fervid rays of the ſun, and from thoſe changes of the air and unexpected ſhowers, which frequently happen in the ſeaſon of harveſt, and ſurpriſing him aſleep, will not fail to occaſion ſome kind of fever, or at leaſt a cold and rheumatiſm.

Nor is the carrying heavy burdens always a work of neceſſity; it is ſometimes the effect of abſolute lazineſs, and ſometimes of a ridiculous vanity to outdo others in feats of ſtrength: but from whatever motive it is attempted, it is ſeldom unattended with ſome fatal conſequence; ſuch as ſpitting blood, violent pains in the ſide, or weakneſs in the loins.

Blackſmiths, ſhip-builders, carpenters, and men who labour in other employments where great bodily ſtrength is required, and a conſtant exertion of it neceſſary, ſhould be cautious not to keep their muſcles a long time together on the ſtrain: in ſuch very laborious trades, frequent reſt is needful; and a precaution which very ſeldom occurs, of adapting the trade to the ſtrength of the body, and the vigour of the conſtitution, is particularly recommended to parents, and others, who have the care of putting youth abroad in the world. How little this is attended to, may be diſcovered by our frequently obſerving a robuſt ſturdy fellow, of ſix feet high, handling a needle; and a little, puny, half-formed mortal, ſmiting at the ſmith's anvil.

Acts of extreme imprudence, and of the

moſt dangerous tendency, are frequently committed by common labourers, either for want of knowledge or conſideration; in the midſt of the moſt violent perſpiration, they ſwallow large draughts of cold water, or, what is infinitely worſe, of weak and ſour ſmall beer; they lay down to ſleep, or ſit to eat and drink, with wet cloaths about them; and when they return from the field cold and benumbed, they fly inſtantly to the fire, or plunge their hands in warm water.

The conſequences of the former acts of imprudence are partial inflammations, the eryſipelas or St. Anthony's fire, and other diſorders of the ſame ſort; and they ſuffer by the latter kind of folly in chilblains, whitloes, and other diſeaſes of the extremities, from which ſuch people are hardly ever free. Yet if they could be prevailed on to ſuffer the inconvenience of thirſt for a few minutes, and the diſagreeable ſenſations of extreme cold till the animal heat could be reſtored by rubbing; or if they would waſh the benumbed part in cold water, or rub it with ſnow, and afterwards dry it with a cloth; they would not only avoid theſe complaints, but prevent others ſtill more painful, dangerous, and alarming.

The ordinary food of the lower claſſes of mankind, is by no means calculated to promote or preſerve health; it is either hard and indigeſtible, or crude and windy; their very bread is frequently unfermented and ill baked; and their drink, ſtale and weak beer, ſour milk, cyder in ſome parts of England, and in others milk and water: from ſuch an unnatural and unwholeſome mixture, ariſe twiſtings of the guts, cholics, and other complaints of the bowels; nor, where poverty and inattention prevail, is the evil eaſily remedied. The beſt advice that can poſſibly be given, is to boil the animal food which falls to their ſhare well, and make broth and pottage from it, with plenty of vegetables; this will conſtitute a cheap and wholeſome diſh, rendering the fleſh more light of digeſtion, and the vegetables leſs flatulent and griping.

Nor are the ordinary huſbandmen at all regular in their hours of eating; ſometimes ſpending the whole day in the ſevereſt labours of the field, without any ſuſtenance, and making but one meal, and that at night, in the whole twenty-four hours: this is a neglect of a moſt pernicious nature; the animal juices and humours exhauſted by hard labour require to be frequently repleniſhed, leſt they become putrid, and occaſion the worſt of all fevers.

Such people ſeldom work at ſo great a diſtance from their habitations, but that warm food might be carried to them by the wife or children in the middle of the day, which would not only be a moſt agreeable refreſhment, but prove highly contributory to the preſervation of health, and to the abatement of the fatigues attendant on a life of daily labour.

But the ſcanty earnings of manual labour are often inſufficient to ſupply the wants of a numerous family, and poverty of living vitiates the humours, and is frequently productive of itch and other diſeaſes on the ſkin; and the general ruinous and crazy ſtate of the cottage inhabited by the labourer, and the want of cleanlineſs which too often accompanies poverty, may be conſidered as additional aggravations of the dangers to which this claſs of people are liable.

But, above all, the want of neceſſary food and comforts, and of medicine in the hour of ſickneſs, are the moſt deplorable circumſtances to which a human being can be expoſed: juſtly celebrated as this country is for public inſtitutions of charity, we cannot omit this opportunity of exhorting the benevolent and humane, to look into the private dwellings of the indigent ſick; to miniſter to their wants, to relieve their neceſſities, and to ſupply them with ſuch medicines as their diſorders require, (a taſk which we truſt the work now in their hands will enable them to perform;) and ſo ſhall they follow the precept of their divine teacher, and entitle themſelves to the favour of God, and the bleſſings and prayers of their afflicted fellow-creatures.

The employment of a *ſoldier*, kept to the ſtrict exerciſe of his duty, is at all times laborious; in actual ſervice much more ſeverely ſo, than that of the artificer, the mechanic, or the huſbandman: expoſed like them to the fatigues of carrying burdens, and to the inclemencies of the weather, ſoldiers ſuffer the additional hardſhips of unwholeſome climates, bad proviſions, hunger and thirſt; are harraſſed with long and tireſome marches; lie down to reſt on wretched beds, from whence they are called by frequent alarms; and even their ſleep is broken, interrupted, and unrefreſhing.

When armies are obliged to keep the field during the fall of the autumnal rains, or in the rigour of winter, diſeaſe proves more deſtructive than the ſword; rheumatiſms, agues, fevers, and fluxes, are worſe enemies to combat with, than thoſe who are oppoſed to their ranks; and a long and inactive campaign, is often more fatal than two or three ſharp engagements.

The humanity of thoſe officers can never be enough commended, who from their own purſes (a practice by no means uncommon at this time) furniſh the ſoldier with a better ſupply of ſhoes and ſtockings than the miſerable pittance of his own pay will afford: the comforts of a change after a wet and dreary march are inexpreſſible, and the advantages reſulting from it, will be the preſervation of health, and the performance of the ſevereſt duty, with ſpirit, alacrity, and chearfulneſs.

The ſoldier who protects our properties, and preſerves for us the invaluable bleſſings which we derive from our preſent happy form of goverment, ſhould be the peculiar object of our care. Commanders ſhould be attentive to ſee that the cloathing provided for the military be good in it's kind, and regularly delivered; that they are not unneceſſarily expoſed to the hardſhips of a winter encampment; and that they are provided with good quarters; the conveniency and comfort of which will in a great meaſure depend on the diſcipline, order, and ſobriety of the men.

In times of peace, idleneſs and intemperance may be as detrimental as the hardſhips of actual ſervice; the dangers ariſing from both may be avoided: by ſtrict attention to diſcipline, and indulging ſome of the moſt induſtrious in working at ſuch trades as may not diſqualify them for the duties of a ſoldier. We remember two regiments in the ſame quarters of cantonment, one of which was as remarkable for keeping the men to hard field duty, as the other was for relaxation in that particular; the conſequence was, that the active corps remained in perfect health, whilſt the other had ſeldom leſs than a third of it's number in the hoſpitals.

We would alſo earneſtly recommend a laudable cuſtom, which prevails in many regiments, of dividing the companies into meſſes, under the care of a ſerjeant or corporal, to procure their food and get it dreſſed; and of appointing a commiſſioned officer to go round to the quarters daily, at the appointed hour of dinner, to inſpect and examine both the quantity and quality of the proviſions: under ſuch regulations we have obſerved with pleaſure the moſt perfect appearances of health, order, and ſatisfaction.

But if the ſoldier may be very properly numbered amongſt the laborious, how much more juſtly may the *ſeaman* be ranked in the ſame claſs: condemned to conſtant confinement within a very narrow and limited ſpace, expoſed to the violence of tempeſts, the viciſſitudes of heat and cold in various climates, continual ſalt, and frequently bad proviſions, total want of vegetables, and ſtinking, unpalatable, and unwholeſome water!

Owing to theſe cauſes, the loſſes which are ſuſtained among this moſt uſeful and neceſſary body of brave and adventurous men, are almoſt incredible; yet theſe have ever been conſidered as the unavoidable conſequences of long cruizes and voyages; for proviſions will naturally decay, the beſt beef and pork will corrupt, the water ſpoil, and the beer (at leaſt ſuch as the navy is ſupplied with) will not keep good for any length of time: of courſe the long and conſtant uſe of ſuch proviſions and liquors, muſt by degrees taint the juices of the body, produce great acrimony in the blood, and diſpoſe it daily more and more to a ſtate of putrefaction; and theſe effects will be conſiderably augmented by living continually in a ſalt moiſt atmoſphere, and breathing the foul polluted air between the decks of a ſhip. Conſtant experience ſhews this to be the caſe. After a ſquadron has made a three months cruize, the men become highly ſcorbutic: the fleet returns into port; freſh air, wholeſome liquor, freſh proviſions, and eſpecially proper fruits and herbs, purify the blood and juices of the ſick, and health is reſtored with amazing rapidity.

That the ſtate of the blood in the ſea-ſcurvy is acrimonious and advancing to putrefaction, is evident from the common ſymptoms of this diſorder; which are, ſtinking breath, corroded gums, high-coloured and fœtid urine, ulcers, black, brown, and blue ſpots, and eruptions on the ſkin; feveriſh heats, foul tongues, bilious dyſenteries, and bloody fluxes: and it is alſo well known, that a vegetable diet and regimen, freſh air and proviſions, and vinous or acid drinks, are a certain and ſpeedy cure when the diſeaſe is not too far advanced. Apples, oranges, lemons, and other fruits which will bear carrying to ſea, have been often known to effect ſurprizing cures in ſcorbutic caſes: and it is certain, that what will cure will alſo prevent; becauſe the officers, who are accuſtomed to lay in conſiderable ſtocks of fruit, and to uſe wine and acid liquors freely, are infinitely leſs afflicted with the ſcurvy than the poor common ſailors, who are not ſo well provided.

Perhaps it may not be practicable to introduce ſuch a general regimen into the navy; but whatever can be done towards it, ſhould by no means be omitted.

Various roots, grains, and fruits, may be kept for a conſiderable time at ſea; ſuch as potatoes, onions, cabbages, and apples; and a large quantity of each may be purchaſed at a very inconſiderable expence, and ought to make a part of the ordinary proviſion of every ſhip of war: and as apples have been found of immenſe ſervice, ſurely the juice of them, when reduced to a vinous liquor, muſt be ſalutary, and ſeems well calculated to correct, by it's acidity, the putrifying quality of bad and corrupt proviſions. But the cyder ſhould be at leaſt three months old before it be ſerved in, and be quite fine, and it ſhould conſiſt of the pure juice of the apple without adulteration; it ſhould be once racked off from the lees into good and ſweet veſſels, which will contribute to it's becoming fine, and prevent it's growing ropy, in which ſtate it is good for nothing. Cyder of a ſtrong body, and well managed, has been known to keep good even to the Eaſt Indies; but if any of it ſhould turn to vinegar, it will be equally ſerviceable, and, properly uſed, conducive to health.

Conſiderable quantities of flour might alſo be carried in every ſhip of war, of which new bread might at convenient times be made, and diſtributed in turn to the whole crew. New malt liquor, or wort unworked, is likewiſe an antidote againſt ſcurvy; and malt may alſo be provided for that purpoſe, which will keep ſome months in caſks, placed ſo as not to be ſubject to damps or moiſture.

But as acids act moſt powerfully againſt this diſeaſe, a free uſe of vinegar ſhould not only be allowed, but directed in the ſeamen's diet; and ſhrub, or the juice of oranges and lemons mixed with rum, may be kept a long time, and will prove infinitely more wholeſome than the fiery Britiſh ſpirits with which the navy is ſupplied, and even theſe might be corrected by the addition of lemon-juice or other acids.

Whenever opportunity offers, living animals and freſh proviſions ſhould be taken on board, not merely to furniſh variety for the tables of the commander and other officers, but to be diſtributed among the crew, and in particular the ſick: ſuch a participation of anti-ſcorbutics would ſave the lives of many valuable ſeamen, who periſh for want only of proper means to keep them alive till they could reach a port, in which caſe they would infallibly recover.

Sailors on duty are continually ſubject to get wet, and being of all human beings the moſt negligent and the leaſt apprehenſive of danger, give immediate way to the calls of ſleep, and turn into their hammocks in the ſame condition they leave the decks; and this imprudent conduct is the cauſe of colds, rheumatiſms, fevers, and even the haſty progreſs of the ſcurvy. If, inſtead of doing this, they were obliged to change their cloaths as ſoon as the watch is relieved; and inſtead of drinking ſpirits and ſtrong liquors, recourſe was had to ſuch as are diluting, perſpiration would be reſtored, and no ill conſequences follow.

But the dangers of the ſeas, and of the diſorders contracted there, are not the only ones to which ſeamen are expoſed. When after a long voyage they get on ſhore, it is almoſt impoſſible to reſtrain them from every ſpecies of exceſs; they riot in drunkenneſs and debauchery, without regard to ſeaſon, climate, or the conditions of their own health, till a fever ſtops their career, and they fall ſacrifices to intemperance and folly.

To thoſe who viſit climates peculiarly inhoſpitable to ſtrangers, and particularly ſuch coaſts as are ſubject to thick fogs, heavy and continued rains, and great damps, the Peruvian bark may be recommended as the beſt, and indeed the only preventive medicine: the quantity of a dram of it may be chewed in twenty-four hours; or, if that method of taking it ſhould be diſagreeable, the following preparation may be ſubſtituted.

> Two ounces of bark—one ounce of orange peel—and half an ounce of ſnake-root bruiſed or coarſely powdered. Infuſe for eight and forty hours in two quarts of white wine or brandy.

Of this a wine glaſs may be taken at proper diſtances from eating, once, twice, or thrice in a day, and will be found a good antidote againſt fluxes, and the fevers incident to unhealthy and in particular hot climates.

It is impoſſible to conclude this ſubject without remarking, that although the methods we have preſcribed for preſerving and reſtoring the health of our ſeamen may be attended with ſome additional expence, yet it will fall very ſhort of that which muſt be incurred in procuring hands to ſupply the places of thoſe who are loſt for the want of theſe precautions; and that the life of one ſkilful and ſeaſoned ſeaman ſaved by providing him with the comforts and conveniences which we have pointed out, is of more real advantage to the ſervice, than a dozen ſuch men as can be picked up by a preſs-gang, employed at an enormous charge, and attended with the additional inconvenience of rendering uſeleſs in their own profeſſion the number of men who compoſe it.

CHAP. III.

Of Air and Exerciſe.

ATTENTION to theſe important articles in the preſervation of health, is not only neceſſary to the ſedentary and inactive, but to every human being that breathes and moves.

In vain are the regulations of regimen, and the preſcriptions of phyſic; in vain the utmoſt efforts of preventive caution and medicinal aſſiſtance; if a foul and noxious air contaminates the very ſuſtenance we ſwallow, and deſtroys the life-ſupporting operations of the lungs, and by degrees all the animal functions.

Yet if we look round us we ſhall ſee, that inſtead of endeavours to keep the air pure, and free from contagious and poiſonous particles, every method ſeems to be adopted that may tend to repleniſh it with unwholeſome and dangerous qualities.

In cities and great towns, the houſes are high, and the windows ſmall, and the ſtreets for the moſt part narrow, and interſected by ſtill narrower courts, alleys, and paſſages; in thoſe confined places the moſt offenſive trades are exerciſed, and the air, already loaded with the ſulphur and ſmoke of continual fires, receives in addition, the exhalations and vapours which ariſe from tallow-chandlers, ſoap-boilers, compounders, chymiſts, preparers of oils and colours, founders, and other noxious trades; and the putrid ſteams and fumes of dunghills, ſlaughter-houſes, and rotten fleſh and fiſh.

Burying the dead in towns and cities is a moſt pernicious practice, ſuch numbers of bodies putrifying ſo near the ſurface of the earth, and that ſurface ſo often diſturbed and opened, cannot fail to taint the air, diſperſe contagion, and occaſion the moſt dreadful diſeaſes.

Still worſe conſequences may be apprehended from interment within churches; the air confined the whole week, ſtagnates and becomes putrid; on the Sunday the churches are crouded, a conſiderable degree of perſpiration is excited, the lungs are employed in a much more than ordinary manner, and the air inhaled is vitiated, and the body prepared to receive infection. Wherever a number of people are pent up together, the air becomes unwholeſome, and perſons of delicate frames and tender conſtitutions feel the effects of it in ſickneſs and fainting, which ſo frequently happen in churches, places of public amuſement, and other aſſemblies, where the air receives injury from the breath, fires, candles, and perſpiration.

Even the cautions of affluence, and the arts introduced by luxury to render the habitations of the wealthy impervious to cold, are extremely prejudicial: continual change of air is abſolutely neceſſary to render it wholeſome; nor ſhould the doors or windows of any room be kept ſhut a whole day, on the contrary, they ſhould be thrown open every two or three hours, and a free current of freſh air admitted.

The low roofs, ſmall rooms, and narrow windows, of the houſes inhabited by the lower order of people, are great enemies to good air; and the want of cleanlineſs too common in ſuch habitations, renders it little leſs than peſtilential; and as perſons in this condition of life have no power of chuſing airy ſituations, they ſeldom enjoy perfect health, ſuch of them eſpecially as are principally employed within doors.

In all places of confinement the air is peculiarly malignant from the breath of thoſe whoſe ſtate of body is inclined to putridity, from the total want of exerciſe and poverty of living; fatal conſequences have ſhewn the dire effects of diſeaſes generated in gaols, and many valuable lives have been loſt to ſociety, whilſt they have been obeying the dictates of conſcience, or the calls of public juſtice.

Hoſpitals, and the apartments of the ſick, are liable to the inconvenience of bad air: the former, from the numbers of neceſſity placed together; and the latter, from an opinion which is ſtill too prevalent, though happily much leſs ſo than formerly, that the excluſion of air, and an extraordinary degree of heat, will conduce to the cure; though the truth is, that almoſt in every caſe, both the one and the other ſerve to render the diſorder more violent, and add in no inconſiderable degree to the difficulty of removing it.

Stagnated air in mines is often the occaſion of very melancholy accidents; and that which is pent up in unfrequented cellars, the bottoms of wells, and the holds of ſhips, will ſometimes occaſion the immediate death of thoſe who are obliged to venture into ſuch places. The ſpaces between the decks of ſhips, and particularly thoſe parts which are appropriated for the ſeamen's ſleeping places, are frequently filled with air of a very bad quality.

To remedy theſe inconveniences, ſo pregnant with miſchief, is well worthy our attention; and though our utmoſt care may be ineffectual to procure good air, in particular circumſtances, yet in almoſt every caſe ſome means may be found to render it leſs obnoxious to health and ſafety; and either to prevent it's being impregnated with pernicious matter, or to purify it in a certain degree.

In the metropolis, and in moſt other populous places in theſe kingdoms, regulations and improvements have been adopted within a few years, which have been admirably calculated to leſſen this evil; but though much has been done, much more remains to do: the removing the ſigns has had an excellent effect; but many dead walls remain in different parts of London and Weſtminſter, and particularly at the ends of ſtreets, courts, and alleys, which might be taken down with equal advantage; as in all ſuch caſes a current of air would be admitted to paſs through, which is now impeded.

The width of the ſtreets in all new buildings, ſhould be fixed by legal authority, and the exerciſe of noxious trades and employments ſhould, under a like regulation, be excluded from every populous town, and reſtrained within certain limitations as to time and place: ſuch as are attended with much ſmoke or exhalation, ſhould be carried on in very open places; and public ſlaughter-houſes ſhould be erected near a river, or other flowing water.

The ſuffering butchers meat or fiſh to be kept till it putrifies, ſhould be forbid under very heavy penalties; ſuch a law would anſwer the double purpoſe of preſerving the purity of the air, and preventing the inhabitants from being poiſoned with unwholeſome food.

No accumulation of filth in dunghills or other heaps, ſhould be permitted; and the emptying the neceſſary receptacles of human ordure, ſhould be ſtrictly confined to certain hours, and the contents conveyed to a much greater diſtance from habitations than is at preſent in uſe. Pits of a certain depth ſhould be prepared to receive it, nor ſhould it be ſuffered to remain uncovered.

Public burial-grounds ſhould be provided at conſiderable diſtances from towns and large villages, in which all ranks of dead, without diſtinction, ſhould be interred. The gratification of that ſpecies of vanity, which ſhews itſelf in the erection of coſtly and ſumptuous monuments, may ſtill be indulged; as the oſtenſible reaſons for ſuch erections are, the perpetuating the memory, and recording the virtues of the deceaſed, it is by no means neceſſary, that the tablet ſhould be inſcribed on the very ſpot where the remains are depoſited; or if the avowed purpoſe of the tomb is to preſerve the body from being diſturbed, this may as well be done in a field as a church.

All public places of worſhip ſhould be conſtantly aired, both by fires, and by throwing open the doors and windows; and this ſhould be particularly attended to in the morning of the Sunday, or other feſtival on which the congregation are to aſſemble. And places of public amuſement ſhould be ſubject to the ſame regulations; ventilators have already been erected on many buildings appropriated to pleaſure; nor do we apprehend the uſe of them would be at all improper in churches, and other places of divine worſhip.

Cloſe rooms are extremely pernicious, whether rendered ſo by the ſize, or by the careful excluſion of air; the effect which ſitting in a confined room has on the breathing, muſt have been perceived by every one: it is aſtoniſhing to conceive, that men ſhould ſubmit to a temporary ſuffocation, to avoid the inconvenience of a moderate degree of cold.

The ill-judged parſimony of low and ſmall rooms, is attended with conſequences of a very diſagreeable nature; the air exhaled in breathing, reverberates from the low cieling before it can be diſperſed, and is drawn again into the lungs, ſo that a dozen people confined in ſuch a room, are actually employed in ſwallowing the breath of each other; an idea which, however diſguſting, is yet founded in truth.

The precautions which, to the credit of humanity, have lately taken place with reſpect to criminals in confinement, require ſtill to be extended. The impriſonment of thoſe who have offended the laws of their country, under the ſame roof, and within the ſame walls, with thoſe who have forfeited their liberties by unavoidable misfortune, or thoſe acts of imprudence to which even virtue is liable, is an outrage on juſtice and common decency: nor ſhould the untried or doubtful offender be ſubject to the hardſhips inflicted on the convicted culprit. Some diſcriminations are abſolutely neceſſary in theſe caſes, and will, no doubt, at a proper time, engage the attention of the legiſlature. Meantime, ſome regard ſhould be had to the air, ſuſtenance, and ſupport, of priſoners of every denomination; for we are inclined to believe, that the peſtilential fever, which has been uſually diſtinguiſhed under the deſcription of the *gaol-diſtemper*, is in general occaſioned by foul air, as well as by actual want of neceſſaries both in food and cloathing; and that ſeparate apartments, a free admiſſion of air, not only by the windows but by ſky-lights, and trap-doors properly guarded to prevent eſcapes; regular, though coarſe meals, and plenty of good water; would effectually prevent in future ſuch horrid effects of the putrid gaol-fever as are recorded at different periods of hiſtory.

The ſame regulations with reſpect to air, are abſolutely neceſſary in hoſpitals, and other charitable inſtitutions of the like kind: particular diſeaſes occaſion very offenſive ſmells; and the ſituation of ſuch patients ſhould be as remote as poſſible from thoſe whoſe complaints are not attended with this diſagreeable circumſtance; and in particular, care ſhould be taken, that the wards or apartments of the different ſick ſhould have no communication. Air in it's paſſage attracts parts of thoſe bodies with which it comes in contact, and is often repleniſhed with thoſe of noxious quality; the ſame air, therefore, which paſſes through the apartments of thoſe who labour under malignant or contagious diſeaſes, ſhould never be ſuffered to approach thoſe whoſe indiſpoſitions are of a leſs malevolent nature. Caution on this head would entirely prevent the ſpreading of infectious diſeaſes in hoſpitals, of which inſtances have occurred, where a fever hath been conveyed into the different wards, and hath been little leſs fatal than that which we have already mentioned under the name of the gaol-diſtemper.

The pernicious cuſtom of excluding air from the chambers of the ſick, is in ſome meaſure broke through; indeed, it is aſtoniſhing that it ſhould have prevailed ſo long; many lives have no doubt been ſacrificed to this abſurd practice, which is equally dangerous to the patient and his attendants: freſh air, admitted by degrees with due caution, ſprinkling the floors and furniture with vinegar and other acids, and fumegating with the flowers of lavender or other aromatic herbs, will prove more beneficial and reviving to the ſick, than any cordial that can be adminiſtered.

The ſtagnated air in mines, may in ſome inſtances be diſcharged by exploſion; and in others, by making larger and more frequent openings and communications, and by this means promoting a free circulation of air in the mine. Cellars which have been long unfrequented, and wells, may alſo be purged of the foul air by remaining open, or fixing a temporary ventilator; and freſh air in large quantities may always be admitted between the decks of ſhips in moderate weather, by throwing up the ports, or opening ſcuppers.

There are alſo many other caſes and circumſtances, in which not only the impurity, but the nature of the air may be prejudicial. The free air of the country is beſt calculated for thoſe to breathe in who are troubled with aſthmatic or conſumptive complaints; but even in chuſing a ſituation for the enjoyment of country air, ſome caution is required. Hampſtead and Highgate hills may agree perfectly with one conſtitution, and contribute to a ſpeedy recovery; for another they may prove too ſharp, and the air of Chelſea or Kenſington may be more ſalutary; the former will be found moſt ſuitable to habits leſs reduced, the latter to ſuch as are more tender and delicate.

In the choice of ſituation for a country reſidence, it will not be amiſs to pay regard to the benefit of good air. High walls, and woods and groves, too near a dwelling houſe, obſtruct the free current of air, and render them damp and unwholeſome; and ſuch houſes as are placed by ſtanding or ſtagnate waters, of whatever magnitude, are unhealthy, becauſe the air is continually damp, and loaded with putrid exhalations.

Gaols, priſons, hoſpitals, and all other buildings provided for the reception of numbers, ſhould be erected in the open air, on elevated ground, and as remote from other habitations as conveniency will permit; and the emptying or collecting night-ſoil or other filth, ſhould by no means be ſuffered in the neighbourhood of ſuch buildings.

But the moſt healthy ſituation, the pureſt air, or the moſt conſtant change and regular enjoyment of it, will be inſufficient for the preſervation of health, without a ſufficient degree of *exerciſe* to promote the regular circulation of the blood, aſſiſt the ſecretion of the fluids, and prevent the relaxation of the veſſels or ſolids.

That the wrath of the Almighty is always tempered with mercy, may be gathered from the original denunciation, which condemned the children of men to earn their bread by the ſweat of their brows; for we find the curſe of hard labour converted to a bleſſing, in procuring the advantages of ſound health and vigorous conſtitutions to thoſe who are daily exerciſed in it; whilſt thoſe who are indulged in the gifts of fortune, are debauched by luxury, and derive no other benefit from the diſtinction, than to pine in palaces, and languiſh on beds of down.

The diſuſe of exerciſe, or a diſinclination to it, begins with a pernicious cuſtom of lying late in bed, and loſing ſome of the moſt precious hours of the day in unneceſſary indulgence, and in acquiring a habit of inactivity: to a man of buſineſs, who remains long in bed, his day is ſo far conſumed before he enters on the duties of it, that he has no time for exerciſe; and to the mere man of pleaſure, it ſerves as an excuſe for not doing that, which from being accuſtomed to neglect, he has no inclination to perform.

Hence you will find the unfortunate artificer, who is confined by neceſſity to one fixed ſpot, and the man of rank and faſhion, who conſigns himſelf to the ſame life of indolence, involved in the like calamities; the days of the one cut ſhort by diſeaſes which he is unable to avert, and thoſe of the other rendered miſerable from diſorders which he has entailed on himſelf by the folly of his own conduct.

Pains in the ſtomach, wind, indigeſtion, diſorders in the liver, kidneys and other glands; and hypochondriac and nervous complaints; are the common and natural conſequences of a life of inactivity: nor are thoſe complaints to be prevented or removed by lolling in a coach, or being danced along the ſtreets in a ſedan-chair. Nature has diſpoſed the whole race of animals to motion, and inſpired them with a deſire of uſing exerciſe; the young of every ſpecies, and children in particular, are impatient of confinement or reſtraint: in this propenſity all other animals are indulged; man alone, from his own choice, is denied the means of eſtabliſhing health, and enjoying the comforts of a robuſt and vigorous conſtitution.

Certain diſorders render the uſe of exerciſe painful, and we have ſeldom regard enough to the moſt valuable of all our bleſſings, to procure it at the expence of even trifling inconvenience. If men would ſtruggle to move about at the firſt attacks of the gout, many of the fatal conſequences of that diſorder might be obviated: and for the rheumatiſm and ſciatica, exerciſe will in many caſes be found an abſolute cure.

The increaſe of all the diſeaſes which are incident to a life of inactivity, may, in the ordinary claſſes of mankind, be attributed to the progreſs of manufactures; and in the higher ranks of life, to the introduction of exceſſive gaming; a vice equally ſubverſive of principle, and deſtructive to health; debaſing thoſe who practiſe it to characters not in the ſmalleſt degree ſuperior to common pick-pockets, and rendering their conſtitutions objects of that compaſſion which they do not deſerve. Whilſt country ſports and rural exerciſes, conſtituted the amuſements of the man of fortune, integrity as well as vigour of mind were the inhabitants of a ſound body; but the modern employments of time in what are called the polite circles of life, are calculated to render men unfit for public truſts, incapable of private friendſhip, depraved in morals, diſſolute in manners, and bankrupts not only in fortune, but in the moſt valuable of all poſſeſſions, health and conſtitution.

In every condition of life, ſome exerciſe may be uſed; the moſt induſtrious, or the moſt needy ſedentary mechanic, will be repaid for dedicating ſome portion of his time to this moſt excellent preſervative, as his labours will be leſs broken by indiſpoſition, or interrupted by diſeaſe; the valetudinarian will find his account in betaking himſelf to it before the progreſs of his diſorders hath rendered him incapable of purſuing it; and if the faſhionable man will ceaſe to pore whole nights over the hazard-box and dice, and employ the mornings, which are now appropriated to ſleep, in wholeſome exerciſe, he may retrieve his honour, and re-eſtabliſh his health.

It is impoſſible to recommend exerciſe of any particular kind, which muſt always depend on circumſtances, ſituation in life, and condition of health; riding, walking, working in the fields or gardens, manly ſports in the open air, and the diverſions of ſhooting and the chace, are adapted to ſuch conſtitutions as have not yet ſuffered by the ravages of diſeaſe, or the effects of any ſpecies of intemperance: milder exerciſes, or ſome of theſe in a more moderate degree, may be better ſuited to debilitated habits; but, avoiding violence, too much can hardly be taken by men of any deſcription. The exerciſes of the female ſex are chiefly confined to walking, dancing, and riding.

But it ſhould be obſerved, that exerciſe at particular times, and by fits and ſtarts, will never anſwer the purpoſes of preſerving or reſtoring health. A courſe as regular as circumſtances will admit is abſolutely neceſſary; ſome part of every day muſt be ſpent in it; and that which is taken in the morning will be found moſt ſalutary: and thoſe who are engaged in public offices and employments, and tied down to certain hours of attendance, will do well to abridge themſelves of a certain portion of the time allotted to reſt, for the purpoſe of employing it in exerciſe; in conſequence of which they will find the ſleep of fewer hours more ſweet and refreſhing, and paſs through the toils of buſineſs with additional ſpirit and alacrity.

CHAP. IV.

Of Food and of Temperance.

FROM the little regard commonly paid to the quality of our aliment, one might be led to conceive it of no great importance to health. We avoid rain, damps, and cold, with the moſt ſedulous attention; we fly from contagion in the moment of alarm; we avoid the perils of the precipice, and the dangers of winds and waves, with the utmoſt care and circumſpection; the ſting of an adder, or the bite of a mad dog, fill us with inexpreſſible horror; yet we taint our blood with unwholeſome viands, and contaminate our juices with gluttonous exceſs, without the ſmalleſt degree of compunction, or the ſlighteſt apprehenſion of the conſequences; we continue to ſwallow poiſon, without conſidering that it muſt one day operate, and we meet the diſeaſe which brings death, without the leaſt recollection that it is occaſioned by our own imprudence or intemperance.

Yet if we reflect, that diet will entirely change a conſtitution, either reſtoring, by a proper choice and judicious uſe of food, that which was before in a diſtempered ſtate to health and vigour, or by the improper quality or exceſſive quantity, reducing a ſound frame and habit of body to debility and diſeaſe; when we are aſſured that it will render the fluids more or leſs thin or glutinous, and brace or relax the veſſels or ſolids, and in conſequence determine whether the animal functions ſhall be performed with regularity, or obſtructed and impeded; we ſhall be ſurprized at our own imprudence, and treat this ſubject as a matter of great concern.

Bread is the firſt grand article of our ſuſtenance, and deſerves very particular attention; and as the goodneſs of our bread depends on the corn, care ſhould be taken both in the ſaving and keeping it. If corn is taken into the barn in a damp ſtate, it is always ſubject to a certain degree of moiſture; and bread made with it will run heavy, and have a peculiar manna-like ſweetneſs: this kind of bread is very apt to lie heavy and turn ſour on the ſtomach.

If the corn has been expoſed too long to the ſun and wind, it will be deprived of ſome part of it's nouriſhing quality, the quantity of flour will be leſſened, and the leaſt nutritious part, the huſk or ſhell, will be increaſed in proportion.

Nor is corn only liable to be ſpoiled in the field or the barn; it frequently ſuffers in the granary, both from being over-kept for the avaricious purpoſe of enhancing the price, and from practices too often attempted to increaſe the weight or bulk of it. Thoſe who tamper in this manner with the healths and conſtitutions of their fellow-creatures, are objects of the ſevereſt puniſhment the laws can inflict.

Bread which is purchaſed of the common baker is often unwholeſome; it is generally highly fermented for the purpoſe of increaſing the apparent ſize, and it is almoſt conſtantly too little baked, leſt it ſhould decreaſe in weight; added to this, it is not always certain that the flour is free from pernicious adulteration, notwithſtanding the heavy penalties juſtly levelled at thoſe who offend in this particular.

Animal food was unqueſtionably deſigned for man; but it was alſo intended that he ſhould uſe it whilſt it remains freſh, untainted, and in it's plain and natural ſtate; and not that it be converted to food when it becomes putrid and offenſive, or that it ſhould be vitiated by high ſpices, rich ſauces, and the voluptuous and deadly ingredients of a modern kitchen.

Even the vegetables with which our tables are ſupplied, ſhould be freſh gathered; after they have been long out of the garden, the quality of the ſalts with which they abound is materially altered: in ſome inſtances, they evaporate or fly off, leaving the maſs vapid and windy; in other caſes they occaſion fermentation, and eaten in that ſtate, produce cholic, gripes, and inflammations in the bowels.

The manner of depriving thoſe animals on which we are to feed of life, is alſo of ſome importance, rendering the meat more or leſs wholeſome. Cattle heated by driving are in a very improper condition for ſlaughter, the blood of ſuch beaſts being already advancing to putridity, and the fleſh growing rotten and offenſive very ſhortly after they are killed. And there are ſome practices of ſo abominable a nature, as to require very particular notice, ſuch as beating the bodies of animals, as ſoon as they are ſtabbed, in order to diſperſe the blood by breaking the veſſels, and preventing it's flowing off, and ſo increaſing the weight of the fleſh; and blowing ſtinking air from the operator's mouth into the inner ſkin, or what is called the cellular membrane, to give the meat the appearance of fatneſs: ſuch horrid methods of rendering food unwholeſome, can hardly be mentioned without diſguſt!

Nor is it only rendered unfit for uſe, by management in the butcher's ſhop; the manner of feeding cattle is frequently improper: graſs, green or dried to hay, is the natural food of the beaſts of the field; oil-cakes, and other articles of an inflammatory nature, are commonly given to the ſtall-fed beaſt, which indeed add to the fatneſs, but deprive the fleſh of it's ſweetneſs, and rob it of thoſe nutritive qualities which it acquires from herbage; in the gathering which, the animal has the additional advantages of exerciſe and air, and being killed in a ſtate of perfect health, is full of juices, and eaſy of digeſtion.

Of animal food, ſome kinds are unqueſtionably more wholeſome than others. Well-fed beef and mutton is certainly to be preferred to veal or lamb, eſpecially if the age of the ox does not exceed ſix years, and the ſheep is not younger; the texture of beef acquires it's perfect ſtate of fineneſs and firmneſs at four or five years old, mutton not ſo early. The fleſh of ducks, geeſe, and hogs, is ſaid to be leſs eaſy of digeſtion than that of chickens, or other butcher's meat; though with reſpect to pork, the ancients were of opinion, that it is more nouriſhing than any other fleſh, which may probably be the caſe, where thoſe who feed on it uſe an extraordinary degree of exerciſe.

But however wholeſome the quality of the animal food provided for our ſupport, the arts of cookery pervert it's uſe, deſtroy the powers of nouriſhment, and reduce it to a mere vehicle for the conveyance of the moſt deſtructive matter into the human body.

Would men be content to eat plain roaſt and boiled meat, with a large proportion of vegetables, at regular hours and proper ſeaſons, avoiding high ſoups and ſauces, ſpices, and other provocatives of falſe appetites, one half the liſt of diſeaſes would be ſtruck out of the catalogue; nor ſhould we ſo frequently be ſhocked with violent ſeizures and ſudden death, which in many, if not moſt inſtances, is owing to high, voluptuous, and irregular living.

The quantity of food can be exactly aſcertained by no other means than by the appetite, and the ſtate of body and vigour of conſtitution; but certain regulations may take place, both with reſpect to that and the quality, very neceſſary to be obſerved, and which will certainly be attended with ſalutary effects.

The food of children hath been the ſubject of a former part of this work, and hath been ſo fully treated of there, that no farther directions are neceſſary on that head; what follows will therefore be applied to perſons advanced to manhood, who wiſh to preſerve the comforts of health, and arrive at old age with unimpaired vigour of conſtitution.

The firſt conſideration ſhould be, the nature and quality of our food; and the directions as to both will lie in a very narrow compaſs.

Corn, well ſaved and preſerved, made into bread moderately fermented and thoroughly baked; well-fed and proper aged animal food; freſh-gathered vegetables in great plenty; and the plain cookery of roaſting or boiling, without the addition of any other ſauces than the animal juices or gravy of the meat; will conſtitute a diet ſuited to thoſe who are in perfect health, and calculated to continue to them that ineſtimable bleſſing.

But it is not enough that we attend to the nature of our food; the times and manner of taking it are equally important; and the moſt wholeſome diet may become deſtructive to health, by an immoderate or irregular uſe of it.

Never eat to ſatiety, or ſwallow a morſel after the appetite is ſo far ſatisfied as to ceaſe it's craving; let it be remembered, that the calls of nature are exactly conformable to her wants, and that to load the ſtomach with more than it demands, is to impoſe a taſk on the digeſtive faculties, which they are unable to perform, and to lay the foundation of all thoſe diſorders which ariſe from repletion, and which are more numerous and dangerous than will be eaſily conceived: nor ſhould the frequent, but moderate uſe of liquids, in the courſe of a meal be omitted; dry food is apt to render the humours viſcid or thick, and excite ſcurvy, inflammatory fevers, and other diſorders of the ſame kind; and, on the contrary, too much moiſture, or large draughts of weak liquors, occaſion indigeſtion, wind, and the whole train of conſequent complaints.

Be content with one ſubſtantial fleſh meal in twenty-fours hours; but if a habit of eating ſuppers is ſo confirmed, as not to admit of being broken off without inconvenience, hard and heavy meats ſhould be avoided: ſhell-fiſh, vegetables, and the lighteſt kinds of animal food, ſhould compoſe this meal, which ſhould be taken early in the evening, and ſome hours before retiring to reſt.

The uſe of tea has ſo univerſally prevailed againſt argument and experience, that it would be in vain to contend againſt it; nor do we apprehend it contains in itſelf any pernicious qualities: the practice of making the infuſion of it exceſſively ſtrong, and pouring it down the throat

boiling

boiling hot, muſt undoubtedly be productive of very fatal conſequences; but ſoftened with a proper mixture of milk or cream, and drank only moderately warm, and accompanied with eating, we are inclined to believe that a breakfaſt can hardly be found more ſuitable to theſe climates, where fruits, lemonades, or water, are of much too cooling a nature, however happily they may agree with the conſtitutions of warmer regions.

But the advantages of a well-regulated diet, are not confined to thoſe in health; the cure of many diſeaſes may be effected by it without the aſſiſtance of medicine, and though the effect of regimen may not be ſo ſudden, yet it will be found more permanent than that of phyſic: milk and vegetables have eradicated ſcurvies, which have baffled the utmoſt efforts of medical art; and if a portion of our animal food was exchanged for a larger quantity of freſh herbs, and roots of the leaſt windy kinds, that diſorder, which has obtained the name of the *Engliſh malady*, as well as putrid and inflammatory fevers, and many other diſeaſes to which we are peculiarly ſubject, would be much leſs frequent than at preſent, nor would they be attended with the ſame malignant and obſtinate ſymptoms.

Regular meals contribute much to health. It is a common, but injurious cuſtom, to breakfaſt on tea, eating little or nothing; and to defer the dinner till three or four o'clock, in order to diſpatch the buſineſs of the day, in what is by this means called a long morning, that the evening may be dedicated to pleaſure; the conſequence is, that the ſpirits are exhauſted, the ſtomach and bowels filled with wind, and the appetite either deſtroyed, or rendered ſo voracious, that a much larger quantity of food is ſwallowed at once than can be immediately digeſted: and theſe inconveniences are attended with another of a ſtill more dangerous nature; the conſcious ſatisfaction of being at leiſure for the remainder of the day, induces men to ſit too long at table, and the glaſs is circulated to reſtore the ſpirits, of which they have been deprived, not by fatigue, but faſting.

The light and early ſuppers which we have recommended, will diſpoſe the ſtomach for a good breakfaſt, to which the dinner ſhould ſucceed at a reaſonable hour; and the labours of the day, of whatever kind, whether thoſe of the head or the body, ſhould be divided between the morning and afternoon. Aged people will find it uſeful to take ſome little matter even between their meals; and members of the legiſlature, or attendants on the courts of law, ſtand in particular need of ſuch refreſhment.

But though we have adviſed a plain and regular diet, and total abſtinence from high and rich ſauces, yet where the ſtomach has been accuſtomed to ſuch pernicious mixtures, the uſe of them ſhould be diſcontinued by degrees, and the appetite weaned from them almoſt imperceptibly. Eat at firſt of one plain diſh, and then taſte another of high cookery; confine yourſelf, not to partake of more than two diſhes at a meal, and you will ſoon find the plain food will be moſt palatable: the pampered appetite can only be ſatisfied with variety, but a ſingle diſh will content the hunger of health, and ſupply all the wants of nature.

To thoſe who by ſituation of life, or exigencies of the public ſervice, have for any length of time been confined to a ſcanty allowance of food, or to ſuch as is of a coarſe and leſs nouriſhing nature, farther caution is neceſſary; the change from ſuch a diet to one more generous ſhould by no means be ſudden; and it behoves every one in ſuch circumſtances, to enter upon the courſe very ſparingly; the tranſition, if not made with care, will be attended with a conſiderable degree of danger.

But if gluttonous exceſs is deſtructive to health, and if the nature as well as the quantity of food is important to the preſervation of it, choice of our *liquors*, and moderation in the uſe of them, is ſtill more ſo: many lives are ſacrificed to the abſurd pleaſures of eating, but many more to the intemperance of the bottle, and to the inordinate uſe of a cordial, originally intended to "*ſtrengthen the heart of man*," but perverted in the abuſe of it to a ſure and deadly poiſon.

The human body being happily compoſed of a due proportion of ſolid and fluid parts, fitted for the regular performance of the functions of life, whatever interrupts theſe functions muſt be ſubverſive of health; and this ſpecies of intemperance will diſturb and diſorder the whole frame, and neceſſarily impair, and by degrees deſtroy, the ſtrongeſt and beſt conſtitution.

Of all the vices to which human frailty is liable, that of drunkenneſs is the leaſt pardonable. The plea of pleaſure cannot be admitted in excuſe of it, nor can it be palliated by the pretence of temptation. The very taſte of wine ceaſes to be agreeable, when the fumes of it begin to affect the ſtomach or head: and the conſequences of inebriety, are to unfit us for the enjoyments we ſeek; and, inſtead of enabling us to reliſh the wit or mirth of our companions, not only to diſqualify us from partaking of it ourſelves, but to deprive the ſober part of the company of the rational joys of convivial converſation.

Intoxication, in a moral light, is a ſin againſt ſenſe; it debaſes human nature to a level with the meaneſt of the brute creation, diſhonours the work of God, and renders uſeleſs the choiceſt gifts of his beneficence.

In a political view, it deſtroys the health, and ſubverts the underſtanding; the faculties are drenched into ſtupidity, and the body conſumed with diſeaſe: and if he who is addicted to this deſtructive vice, would only turn his eyes on the votary to it, and on the man of ſobriety, every argument againſt the practice of it would inſtantly become unneceſſary.

Let him obſerve the drunkard in the ſeveral ſtages of his tranſitory life, and he will find him in the outſet bloated, ſuffocated, and inflamed; as he advances, feveriſh, reſtleſs, and uncomfortable, troubled with wind, indigeſtion, and a depreſſion of ſpirits, only to be relieved by a repetition of the miſerable cauſe of the complaint: he will find him racked with excruciating gout, and tormented with unceaſing head-ach; as his ſhortened life draws to a period, he will be ſwelled with a dropſy, or emaciated by a conſumption; choaked with phlegm, or torn to pieces with a hectic; and if he eſcapes being cut off in youth by the violent effects of intemperance, he arrives prematurely at old age in the prime of life, and death only releaſes him from the pains and torments which have been the acquirements of his own folly and imprudence.

Nor does his mind fare better than his body; the ſtings of conſcience may be averted for a moment by the temporary deprivation of reaſon; the arrows of reflection may be turned aſide by the riot and debauchery of the night, but ſorrow "*cometh in the morning*;" and the firſt waking proſpects which preſent themſelves, are a ſhattered conſtitution, a broken fortune, an injured family, and a wounded reputation; objects too horrible to be endured, and yet only to be removed at the expence of plunging again into the ſame ſcenes which brought them to his view: and thus a continual courſe of alternate ſin and repentance, fill up the wretched remnant of life, till it can no longer ſtruggle againſt the united efforts of diſeaſe and deſpair.

On the other hand, let him remark the man of ſobriety and temperance; in appearance manly, firm, and erect; in countenance florid and healthful: active and vigorous in body, ſerene and ſprightly in mind, he paſſes from youth to manhood without diſeaſe, and advances to old age without it's infirmities; deriving comfort and happineſs from the bleſſings of health, unallayed by the terrors of danger, or the conſciouſneſs of having deſerved it; and after a life as free from pain, as the ſtate of mortals will admit, gradually ſinks without a pang, and exchanges it for a better, unconvulſed by the agonies of diſtemper, and undiſturbed by apprehenſions of the change he is about to undergo.

Drinkers of different liquors are afflicted with different diſorders. He who ſucks large draughts of malt liquor, is by that glutinous and fattening liquid blown up to a monſtrous ſize, ſhort-breathed, inactive, and diſpoſed to diſeaſes of the lungs. The immoderate wine-bibber is in a perpetual ſtate of heat and inflammation; and he who is deſperate enough to uſe quantities of ſpirituous liquors of any kind, ſwallows liquid fire, and carries about with him an unquenchable thirſt, and an eternal fever.

Thoſe hardy drinkers, who have by degrees habituated themſelves to bear torrents of liquor, without being affected with actual intoxication, are yet equally ſubject to the fatal effects of their indiſcretion; gravel, ſtone, gout, ulcers, and all the nervous and hypochondriac complaints, are their wretched companions through life.

To the honour and advantage of the iſland of Great Britain, this odious and deſtructive vice loſes ground daily, among thoſe whoſe example we truſt may in time prevail to put a total ſtop to it in every claſs: and but for the introduction of a method of deſtroying time, almoſt as pernicious to health and morals—exceſſive gaming—we ſhould flatter ourſelves, that the decline of this ſtill flouriſhing empire is at no inconſiderable diſtance.

But whilſt we declaim againſt the vice of drunkenneſs, we would not be underſtood to mean, that wine ſhould be baniſhed from the tables of the wealthy, or good and wholeſome malt liquor from among the refreſhments of the induſtrious; a few glaſſes of the former, generous and unadulterated, and moderate draughts of the latter, fine and of a proper age, may be as conducive to health, as the intemperate uſe of either will be prejudicial.

Common drink with our meals may either conſiſt of water or table-beer: of the firſt, that which is pure, ſoft, and taſteleſs, is the moſt wholeſome; that which ariſes immediately from the ſpring is to be preferred; river water, which does not tinge the banks or ſhores with any appearance of a mineral quality, is the next in goodneſs; but the waters of ſtagnate pools or ponds, are by no means to be uſed, being always in a certain degree corrupted and inclined to putridity.

Table-beer, if circumſtances admit, ſhould be brewed at home, becauſe the compoſition is in that caſe certain, which perhaps is not always ſo with the production of the common brewhouſe. We would alſo recommend that it ſhould be of ſtrength ſufficient to paſs through the fermentation, without the riſque of growing ſour. Over new and ſtale malt liquor are alike unwholeſome; the former occaſions wind and cholic, the latter acidities in the ſtomach and bowels, and indigeſtion. Table-beer, well prepared, properly kept, and moderately uſed, will in very few caſes prove injurious.

But there is another ſpecies of intemperance not leſs deſtructive than either of thoſe we have named: the paſſion which tends to the propagation of our ſpecies is too often perverted; and thoſe deſires, which were intended, under the regulations of reaſon, to contribute to the happineſs of mankind, are ſuffered to become inordinate, to degenerate into vice and wickedneſs, and to become the ſource of a thouſand ills.

One ſhould be inclined to think, that the ſpectacles of horror, which are daily to be ſeen in our ſtreets victims to carnal intemperance, would be ſufficient to deter mankind from a courſe ſo big with every kind of ruin; yet are our hoſpitals filled with wretches marked with the moſt loathſome and painful effects of this exceſs; our gaols crouded with criminals, tempted in the gratification of it to the commiſſion of the moſt enormous offences; our ſtreets thronged with proſtitutes, the unfortunate participators of the guilt; and youth of all ranks and denominations involved in ſcenes of the moſt ſhameleſs and abandoned profligacy.

Laws have been found ineffectual to curb the licentiouſneſs of this paſſion, advice has been offered in vain, and precept has only taught to know, but not to avoid: example can alone prevail; if decency in this reſpect was obſerved by thoſe who are of ſtations conſpicuous, and of rank to command reſpect, they who now look up to and imitate their indiſcretions, would in like manner copy their prudence, and the public ſtumbling-block being removed, reformation would probably follow.

Meantime, it is our office to warn thoſe who are under the violent influence of lawleſs appetites, that the effect of indulging them is ſure and fatal; that the leaſt dangerous conſequences will be weakneſs, inability, and early incapacity to enjoy them at all; and the more deadly ones, thoſe taints which contaminate the whole ſyſtem of the human body, are hardly ever thoroughly eradicated, are painful in the endurance, difficult and obſtinate in cure, and by frequent repetition, deſtroy the beſt founded conſtitution, and reduce the human frame to a lump of loathſome deformity; and not only render life itſelf a burden, but convey to the wretched poſterity of the unhappy ſufferer ſuch a portion of miſery, as to leave them little reaſon to remember with gratitude the author of beings, who are condemned, by the ſins and imprudences of their parent, to ſuffer the pangs of undeſerved diſeaſe, and languiſh through their lives without a hope of attaining the bleſſings of eſtabliſhed health and vigorous conſtitutions.

Nor are theſe evils of a private nature only: as they tend to the corruption of morals, and to the depravity of the mind, ſo they alſo prevent population, and deprive the ſtate of it's riches and ſtrength; and from the united powers of both theſe cauſes, commonwealths of the firſt magnitude have been brought low, and the mightieſt empires overthrown: for no combination of political force, nor any arrangement of human wiſdom, can withſtand the force of univerſal degeneracy, profligacy, and vice.

CHAP. V.

Of Cloathing and Cleanlineſs.

IF we were to form our opinions of propriety from the cuſtoms and uſages of mankind, the diſcuſſion of this article would engage but a very ſmall portion of our time or attention. The manifeſt abſurdity and infinite variety of dreſs, ancient as well as modern; the aſtoniſhing changes of faſhions; and the different modes of accompliſhing the ſame purpoſe, from the monarch of Perſia with chains and bracelets of diamonds, to the Hottentot of diſtinction ornamented with a larger ſhare of animal entrails; would induce us to believe that the whole is mere matter of fancy, and that it is of no importance to health, whether, like the wretched New

Hollander, we ſhiver naked in regions of froſt and ſnow; or like the luxurious Aſiatic, ſubmit to accumulated loads of pompous finery in climates of eternal ſummer.

But if we ſuffer ourſelves to act under the guidance of reaſon, inſtead of the influence of cuſtom, a rational ſyſtem of cloathing will preſent itſelf, ſuited to age, conſtitution, climate, and ſeaſon; always maintaining the purpoſes of aſſiſting Nature, at leaſt taking care not to obſtruct her operations in the promotion of perſpiration, on the free and uninterrupted performance of which depends principally the health of the human body.

In youth, when the circulation is briſk, and perſpiration neceſſarily copious; when activity and conſtant exerciſe keep the humours in a due degree of warmth; when the ſkin is tender, and the pores open; a leſs quantity of cloaths, and thoſe of a light nature, will procure heat enough to aſſiſt the animal function: but as we advance in years, the blood flows ſluggiſhly, the fluids cool, and the ſkin becomes hard, thick, and ſhrivelled, and more cloaths, and thoſe of warmer materials, will be found neceſſary.

The robuſt, florid, or ſanguine habit of body, will endure the cold without ſhrinking; whilſt the puny, tender, and delicate conſtitution, is affected with every blaſt of wind, and looks forward to the rigours of approaching winter with fear and apprehenſion: that theſe two different frames require cloaths differing in degrees of warmth, may be diſcovered without any extraordinary ſagacity, and this difference will be regulated by the exerciſe of common prudence.

But the reſpect which is due to climate in this particular, is a matter of very great importance; and perhaps many of the diſeaſes which are conſidered as local, and of which men who viſit different countries complain, as the effects of a ſickly coaſt, or an unhealthy climate, do in fact owe their origin to a relaxation of our attention to this article of cloathing.

It is a fatal miſtake, that in warm climates greater liberties may be admitted in this particular, than in thoſe more remote from the influence of the ſun; yet it is no eaſy matter to obviate this prejudice, becauſe it is founded on a compliance with our inclinations, and we are too apt to approve of what we find immediately agreeable, without regard to conſequences, which by being ſomewhat diſtant, ſeem leſs intitled to our conſideration.

But the fact is, that the cuſtom in warm countries of throwing off the external garment the moment the wearer comes within a houſe, though he is at that inſtant ſweating at every pore; the habit of chuſing the moſt cold and airy part of the houſe to repoſe and refreſh himſelf in ſuch a ſituation; and the impatience of heat, which prompts him to expoſe himſelf to the cold and chilling damps of the night; are indiſcretions of the moſt fatal nature; ſometimes producing only the more ſlow and tedious diſorders, but more frequently thoſe which are immediate and acute.

In warm climates, the texture of the human body is ſo perpetually heated, that it is much more ſenſible of cold than in very temperate ſituations, and a cold blaſt of wind ſeems ſometimes to penetrate to the very vitals. And if it be conſidered, that the means of preventing a great number of diſorders, are the wonderful diſpoſition which nature has provided in the animal œconomy for carrying off through the ſkin whatever is noxious or of no uſe to the human body, and of how much conſequence this diſcharge is for that purpoſe, it will be readily apprehended, that the dreſs which is beſt calculated to ſecure that function from interruption, will be the moſt likely to preſerve health.

But, on the contrary, it will be found equally prejudicial to load on ſuch a quantity

tity of cloathing as may increaſe the animal heat; ſuch apparel as will protect the ſkin from being acted upon by every cold wind that blows, and prevent the perſpiration from being obſtructed, is only meant to be recommended; and the ſame regulations are more particularly neceſſary with reſpect to bed-cloaths or coverings at night, when perſpiration is always more plentiful, and indeed more conducive to health, than in the day.

The cloathing ſhould alſo be adapted to the ſeaſon of the year, and neceſſity will in general point out the proper times for the changes; but great care and caution ſhould be uſed in making them: the tranſition from furs to ſilks ſhould not be ſudden; and, perhaps, there may be ſomething more than caprice in the nice diſtinctions made by the French nation, in ſuiting different dreſſes to the various ſeaſons of the year, and obſerving the times of appearing in them with ſuch critical niceneſs.

But it is not only warmth that is to be conſulted in the choice of cloathing; eaſe and convenience are articles of material conſideration; and we cannot avoid condemning thoſe faſhions which demand a ſacrifice of both, nor help feeling extreme regret at the ſight of a beautiful woman putting health and life to the hazard, in compliance with the abſurd cuſtoms of loading her head with a burden which nature never deſigned it to bear; and at the ſame time admitting the air to thoſe delicate parts of her frame, which the ſame excellent guide would teach her to protect. We cannot but deplore the prevalence of vanity, when we ſee ſuch figures as we have deſcribed led up to the altar of Vanity; nor ſhall we on this occaſion forbear to admoniſh our fair countrywomen to ſet their charms in higher eſtimation, than to conceive they will derive additional luſtre from a load of falſe hair, or the prepoſterous circumference of a modern fardingale.

The method of making and fitting cloaths to the body, is alſo worth our attention; ſtrictures of every kind are injurious to health, obſtructing the circulation, and producing various diſeaſes in the different parts, as they are ſubject to the reſtraint. When the neck is tied up with a collar or neckcloth, it occaſions head-achs, giddineſs, and even apoplexies: the ſtays of females are an unnatural conſtraint, and interrupting all the functions of the inteſtinal parts of the body, cauſe ſickneſs, faintings, and coughs and diſorders affecting the lungs; bandages on the limbs, ſuch as garters or tight wriſts, are productive of cramp, gout, and palſy; and ſtrait ſhoes anſwer no other purpoſe than to cripple the feet, and bring on galls, corns, and ſoreneſs.

How far the conſtruction of the modern European dreſs is calculated to preſerve health, is a queſtion which may deſerve the diſcuſſion of ſome nice and critical obſerver; nor do we apprehend ſuch a diſquiſition would be either unuſeful or unentertaining; it might perhaps lead to ſome rational mode of covering the human body, equally free from the inconveniences of expoſing it in any manner to the inclemencies of weather, and the dangers attending the unneceſſary compreſſions which have been introduced by faſhion and vanity.

But we cannot agree with certain ingenious modern writers, who recommend even uniformity of colour, and repreſent neatneſs, cleanlineſs, and elegance, as depending on the rejection of ruffles, laces, and trimmings: on the contrary, as we admire the colours of the rainbow, and are delighted with the various tints of a bed of tulips; as we obſerve with pleaſure the enamelled ſtreaks which "*lace the ſevering clouds*," and find traces of order and deſign in the plaits and folds of the roſe-bud; ſo we can diſcover no impropriety in an imitation of the beautiful works of God, or conceive that unornamented ſimplicity of garb is either conducive to health, or peculiarly pleaſing to that Being, who has provided the eye of man with objects of eternal variety, from the ſnow on the mountain top, to the gloſſy jet on the raven's back.

In the original foundations both of the Jewiſh and Mahometan religions, *cleanlineſs* was a conſiderable article of the practice enforced; and conſidering the inſtitutions reſpecting it as mere matters of policy, they are certainly replete with prudence, wiſdom, and humanity.

Both religions were at firſt propagated among the loweſt orders of mankind; and as men in this ſituation are in general compelled by circumſtances to reſide in narrow and confined habitations, where the air is polluted by being pent up, and rendered more noxious by the fumes ariſing from filth and naſtineſs, *prudence* ſuggeſted the inculcation of frequent purifying, as eſſentially neceſſary to the preſervation of health; and it might be an argument of conſiderable weight in the extending theſe religions, that thoſe who embraced them were evidently under the more immediate protection of Heaven, in the enjoyment of the chief bleſſing of life.

As theſe religions prevailed, and populous towns and cities followed the doctrines of them, the *wiſdom* of legiſlators added the ſanction of law to the precepts of religion; and ſenſible that the removal of impurities from the perſon, did but partially effect the purpoſes of cleanlineſs, they made wholeſome proviſions for the maintenance of it in many other reſpects.

And when the cauſes and cure of diſeaſes became ſubjects of enquiry and more minute inveſtigation; when diſcoveries were made, that certain diſeaſes were contagious; and experience had aſcertained the modes and degrees in which infection might be communicated; *humanity* became intereſted in putting a ſtop to the progreſs of it, and pointed out attention to this important article as the probable means.

Of all the claſſes of mankind, manufacturers, and mechanics of certain denominations, are moſt liable to contract habits of dirtineſs, betaking themſelves immediately from their beds to their labour; unſeen and unnoticed, they are apt to diſpenſe with all regard to their perſons, and they paſs ſix days out of the ſeven with uncombed hair, unwaſhed ſkin, and unchanged linen: nor do they beſtow more pains on their habitations than themſelves; and the dog, the cat, the hog, the hens, and the children, indiſcriminately wallow in the filth to which each contributes.

The peaſant and the leſſer farmer are in ſome inſtances equally regardleſs of this great preſervative of health; though the conſtant acceſs of freſh air, the odours of bloſſoms and herbage, and the ſweet breath of ſeveral ſorts of cattle, render the effects of want of cleanlineſs in this order of people leſs obſervable.

Nor are the great or the wealthy totally exempt from offending againſt perſonal purity, though their houſes are free from dirt, and their linen and cloaths continually ſhifted; yet ſuch as are not accuſtomed to bathe, leave their feet and the greater part of their ſkins unwaſhed for a length of time together, and fully poſſeſſing the means of perfect cleanlineſs, neglect it in this very important article.

It is the duty of commanders, both in the army and navy, to enjoin proper regulations on this head, and to look that they are ſtrictly obeyed. In the camp, change of ſtraw, airing and even waſhing blankets, and diſtant receptacles for excrement, are objects of great importance. In quarters, care ſhould be taken that ſoldiers are not crouded either in rooms or beds, and that both are kept clean and free from offenſive ſmells: and in hoſpitals, cleanlineſs is as eſſential to the removal of diſeaſes as medicine itſelf; nay, we may be aſſured, the one will prove wholly inefficacious, if the other is diſregarded.

Compelling ſeamen to waſh their bodies

frequently, and their linen conſtantly, and to air their bedding on the decks in moderate weather; ſcouring every part of the ſhip between decks, as often as conveniency will permit; fumigating it with the ſteams of hot vinegar, or the ſmoke of dried aromatic herbs, and above all, thoſe parts which are appropriated to the ſick, will often prevent the approach, and always the ſpreading of diſeaſe: and many of his majeſty's ſhips of war, where ſimilar management prevails, are free from offenſive ſmells, and every appearance of naſtineſs; and in the narrow ſpace to which the crews are confined, they enjoy the comforts of life, and the bleſſings of health.

The dirt which is ſuffered to remain on the ſkin ſtops the pores, and obſtructs perſpiration. Linen ſaturated with ſweat, and hardened with filth, no longer anſwers the purpoſe of abſorbing the moiſture from the ſurface of the body; and from hence proceed colds, fevers, and a variety of other diſorders. Infection will lodge a long time in bedding, dirty cloaths, and even in the hair and upon the ſkin, and epidemical diſeaſes will frequently be communicated in this way, and break out in the moſt terrible and unexpected manner.

A few general rules will ſuffice to remedy all the inconveniences, and obviate the dangers which ariſe from the neglect of this domeſtic duty; and as the compliance with them is within the reach of individuals of every degree, we flatter ourſelves, a regard to their own welfare and intereſt, and a general wiſh to promote the public good, will be found inducements abundantly ſufficient to excite mankind to an exact and ſcrupulous performance of it.

Waſh the hands, face, mouth, and behind the ears, every morning as ſoon as you leave your bed, without regard to any work or buſineſs that you are immediately to engage in, however dirty in itſelf.

Let the ſkin of your whole body be waſhed as often as conveniency will permit; women, and ſuch as have not an opportunity of bathing, will find a baſon and cloths, though not equally ſalutary, yet extremely uſeful.

Change your linen often, and rather abridge yourſelf of other enjoyments, than neglect an article ſo indiſpenſible to the preſervation of health.

Let no work of filth be performed in the houſe, which can poſſibly be done in the open air; waſhing foul linen in a cloſe place may be attended with very diſagreeable conſequences.

Permit animals of all kinds to ſleep in ſome outhouſe, remote from the habitation of the family; nor on any account ſuffer them to be confined long in a room.

Let phyſicians, ſurgeons, nurſes, and all other attendants on the ſick, waſh their hands, and expoſe themſelves for ſome time to the open air, before they paſs from one patient to another, or ſet about any of the common offices of life. We are perſuaded, diſeaſes are very often ſpread in a way which ſuch precautions would prevent; nor are they leſs neceſſary for the attendants themſelves, than for thoſe with whom they are to have immediate intercourſe.

Nor ſhould the ſick themſelves be denied to participate in the bleſſings of cleanlineſs: if thoſe in health enjoy the agreeable ſenſations which ariſe from waſhing and change of linen, how highly muſt theſe refreſhments contribute to the comfort of the convaleſcent; and, with due caution, ſo far will ſuch an indulgence be from injury, that it will in many caſes effect more towards a cure, than the beſt advice which can be procured, or the utmoſt efforts of medicine.

CHAP. VI.

Of Indolence and Sleep.

IN a foregoing chapter, we have conſidered exerciſe as an indiſpenſible ingredient in every preſcription for the preſervation or recovery of health; and we have deſcribed the evils which attend a life of inactivity, and the benefits which are derived from a contrary courſe: but we are now to treat of *indolence*, or a voluntary diſuſe of motion; or of thoſe actions of the body, which are neceſſary to the due performance of the functions of life.

Whether indolence is occaſioned by a ſluggiſh diſpoſition of mind, or has arrived at a ſtate of indiſpoſition, it is alike important to us to ſhake it off: it is at firſt an indiſcretion, advances to high imprudence, and at length acquiring a habit by long continuance, becomes actually a vice, unfitting us for all the purpoſes of ſociety, and proving not only deſtructive to health, but ſubverſive of thoſe principles which ſhould inſpire us to acts of public virtue and private benevolence.

Men of eaſy fortunes and undiſturbed paſſions, are apt to indulge themſelves in a kind of ſupine inattention to the buſineſs of the world; accuſtomed to have all their wants anticipated, and all their deſires gratified, and ſtrangers to the anxieties of hope, and the perturbations of fear, they are content to glide through life without intereſting themſelves in the concerns of others, and feel no impreſſions which are not actually made upon themſelves.

But even in this ſtate, indolence is inconſiſtent with virtue or morality, which demand the exerciſe of our faculties on every occaſion that offers, either to benefit ourſelves, or aſſiſt our neighbours.

Indolence of mind ſoon communicates it's influence to the body. He who conceives that he has nothing to do in the world, will ſoon loſe all deſire of mingling with it; he will ſit ſtill, and expect the ordinary occurrences of life; and actuated by no emotions, will have no views of gratification in changing his ſituation.

At this period commences the reign of indiſpoſition; his mind will ſoon become ſick of a world which exhibits no charms to him; his body will correſpond; and loathings, indigeſtions, and wind, hypochondria and melancholy, will diſturb his quiet; and he will be either rouzed by the pangs of diſeaſe, and the terrors of danger, or ſink into lethargic ſtupidity, and quit a being which is indeed ſcarce worth preſerving.

If the picture we have drawn is alarming, it is founded on circumſtances which exiſt in a thouſand inſtances; and it behoves thoſe who feel the creeping advances of indolence, to apply themſelves to ſome active employment, at once to reſiſt the advances of this inſinuating invader of their health and happineſs, who under the guiſe of accommodation, and in the garb of tranquillity, ſaps the foundations of mental and bodily vigour, and leaves the mind a prey to deſpair, and the body to diſeaſe. However much ſuch perſons may be at a loſs at firſt to engage themſelves in ſatisfactory purſuits, private wants and the exigencies of public affairs will ſoon afford them opportunities to enjoy the conſcious pleaſure of deriving health, happineſs, and reputation, from thoſe active ſcenes which they have been accuſtomed to forego, for the ſake of a criminal indulgence in unwarrantable and unprofitable indolence.

It may ſeem abſurd to attempt the eſtabliſhment of rules for *ſleep*, the neceſſity for the longer or ſhorter duration of which muſt in general be governed by circumſtances beyond the preſcriptions of medical or anatomical art, or the reach of determined regulations.

Yet general ideas of the quantity of ſleep neceſſary for the preſervation of health, may be gathered from age, conſtitution, and habit of body. The human frame, exhauſted by the natural functions, and fatigued by the employments of life, requires reſt from labour, and the refreſhment of ſleep: nor is the ſuſpenſion of ſleep leſs needful for the mind, the faculties of which would be rendered dull, and impaired by continual and uninterrupted exerciſe. But too much ſleep inclines the body to fat, and is apt to occaſion diſorders of the head; and to affect the mind with heavineſs, want of apprehenſion, and inactivity: and weak nerves, low ſpirits, inflamed eyes, and an over thin habit, are the conſequences of not allowing ſufficient indulgence in this particular.

Infants require a great deal of ſleep; youth and labouring perſons a larger ſhare, than thoſe who are arrived at manhood and lead leſs active lives; and the advances of age call for longer ſuſpenſions from the toils and cares of the world.

Early riſing has been ſo often recommended, and the ſalubrity of the practice ſo ſtrongly enforced by writers of all claſſes and denominations, and on almoſt all ſubjects, that it is wholly unneceſſary to urge it farther than to obſerve, that it diſpoſes men to betake them early to reſt, and to divide the day and night into thoſe portions which appear conſonant to the diſpoſition of that Almighty Power, which directed *man to go forth to his work and to his labour until the evening.*

Whether the hours of ſleep are actually more refreſhing before midnight than after, or whether the cuſtoms of youth acquire ſuch a habit as to become in ſome meaſure conſtitutional, we ſhall not pretend to determine; but whoever will compare the countenance of him who ſpends his night in pleaſure, buſineſs, or ſtudy, and dedicates morning and day to ſleep, with that of the man of regularity, who retires in good ſeaſon, and meets the ſun at it's riſing, will in the pale, wan, and haggard viſage of the one, and the florid, briſk, and healthful caſt of the other, find reaſons more convincing than arguments can offer, for a courſe of life apparently productive of comforts, which no man in his ſenſes would give up to the anxieties of the gaming-table, the unſubſtantial enjoyments of bottle mirth, or the uncertain fruits of intenſe and laborious ſtudy.

Many are the requiſites to procure ſound and ſweet ſleep; health of body, temperance in eating and drinking, moderate exerciſe, and above all, a mind at eaſe, will conduce wonderfully to the refreſhment of ſleep.

Temperance is at our own command; and he who chuſes to lie down with a load of wine, or a full and hearty ſupper in his ſtomach, muſt thank himſelf if his night is diſturbed with frightful dreams, nightmares, and hobgoblins, and his morning uſhered in with head-ach, ſickneſs, and loathings.

The degree of exerciſe does not always depend upon ourſelves; that which ariſes from labour, is ſeldom attended with inconvenience to reſt, becauſe it is accuſtomed; but the neceſſity of hard travelling, or violent exertions, either in ordinary employments, or in ſports and amuſements, is apt to render ſleep broken, interrupted, and unrefreſhing.

But who ſhall ſay to the afflicted mind, lie down in peace, or ſmooth the troubled ocean of anxiety into tranquillity? Almoſt every phyſician who writes, and every friend who adviſes, bids us go to our repoſe with minds ſerene and unruffled. Alas! where are the balſams that can medicine the ſon of adverſity to ſweet ſleep, or where are the arguments that can turn the ſtream of ſorrow? Sleep, like other friends, forſakes the manſions of wretchedneſs, and ſpreads it's benign influence over health, eaſe, and proſperity!

The beſt directions which can be given, are to proportion the time allotted to ſleep to the calls of nature; to go to reſt early, and riſe betimes; and never to ſuffer intemperance or indolence to prolong it, or the cares of the world to retrench it unreaſonably. He who ſleeps much will be a drone; and he who robs himſelf of this neceſſary refreſhment, will be like the bee, who with unremitting induſtry gathers the honey which he is not permitted to enjoy.

CHAP. VII.

Of the ordinary Evacuations of the Human Body, and certain natural and acquired Cauſes of Diſeaſe.

THE ordinary evacuations are, *excrement*, *urine*, and *perſpiration*; and any one of theſe being obſtructed, the body can no longer continue in health.

Regular ſtools are eſſentially neceſſary: when the dregs of our food lie too long in the inteſtines, they not only produce diſorders of the bowels, but corrupt all the humours; and when they paſs off too quickly, the nouriſhment of the body ſuffers. Moderation in this, as well as in every thing elſe, is to be deſired, and may be attained by regularity of living, both with reſpect to eating, drinking, and ſleeping.

It is by no means eaſy to determine how many ſtools are neceſſary to health, as this muſt depend on the ſize of body, the quantity of nutrition ſwallowed, the habit, and more than all the reſt, on cuſtom. Some are of opinion, that one ſtool in twenty-four hours is ſufficient: to others it ſeems neceſſary that this evacuation ſhould be repeated twice in that time; and perhaps a ſtool every morning and evening, may be abſolutely requiſite for a hearty perſon in high health.

To procure regular ſtools many methods are recommended: ſome adviſe that nature is to be ſolicited by attempts to go to ſtool at certain hours, with or without occaſion; and that by this means, a habit may be acquired, which will in time become natural.

Others urge the neceſſity of riſing early, and immediately uſing exerciſe in the open air, and inſiſt that the poſture of lying in bed is unfavourable to this evacuation; the propenſity to which, they obſerve, is abated by the increaſed perſpiration, which is excited by the warmth.

And there are others who maintain, that any diſpoſition to coſtiveneſs ſhould be removed by medicine before it becomes habitual, and that although there are inſtances of perſons in good health, who have not the benefit of this evacuation for many days together, yet that this is an unnatural ſtate of the body, and will ſooner or later occaſion diſeaſe.

To each of theſe opinions ſome regard may be due. Offering to evacuate at conſtant and fixed times, may by degrees produce the effect deſired: early riſing and exerciſe is in this, and every other caſe, highly commendable; and medicine ſhould not be neglected, if nature obſtinately refuſes to perform her office.

But we are ourſelves inclined to believe, that a proper attention to the rules and regulations which we have endeavoured to eſtabliſh, reſpecting the ordinary functions of life, with regard to food, liquors, air, and exerciſe, will leave very few difficulties to combat with in the management of this evacuation; and that he who eats moderate meals of wholeſome diet, drinks temperately, and leads a life of activity, will need no reſtrictions to hours, or poſtures, nor require the aſſiſtance of phyſicians or medicines.

But where coſtiveneſs is actually become a diſeaſe, it will be neceſſary to avoid every thing of a binding or heating nature; and where a looſeneſs is of long continuance, and threatens worſe conſequences, ſuch food and drink ſhould be uſed, as is of an aſtringent and ſtrengthening quality; directions for which, as well as for medicine in both caſes, will be found in other parts of this work.

If we are to place confidence in the pretences of certain quackiſh and empiric practitioners of phyſic, ancient as well as modern, we ſhould ſpeak of the evacuation of urine, and in particular of it's appearance, with great caution and diffidence; for if the various diſorders which affect the human body are to be diſcovered and diſtinguiſhed by inſpecting the urine, we may lay aſide ſymptoms and indications, as totally foreign to medical knowledge, and learn to form a judgment of the patient's ſituation, not from feeling his pulſe, examining his body, and enquiring into the nature of his complaints, but from inſpecting, taſting, and analyſing his water, which theſe wonderful adventurers would impoſe on mankind as containing infallible information, not only of the nature of the diſeaſe, but of the progreſs it has made, and the probability of cure.

But as the urine may be affected by ſo many different cauſes, ſuch as exerciſe, other evacuations, the paſſions of the mind, and above all, by the nature of the food and liquids, which may all, or any of them, occaſion very great changes both in the quantity, appearance, and compoſition of this diſcharge; ſo we are of opinion, that it is utterly impoſſible to form an accurate judgment form an examination in which we are liable to be deceived by circumſtances which remain uncommunicated, either of neceſſity or from neglect.

The only dependence therefore, which ought to be placed on the appearance of urine, is to mark the progreſs and changes of diſeaſes, by comparing it with the ſymptoms diſcoverable on perſonal attendance and inſpection.

Ingenious phyſicians have attempted to aſcertain the certain quantity of urine which ought to be diſcharged for the purpoſes of health, in proportion to the liquids taken in; but as theſe calculations make no allowance for the variation of perſpiration, which is well known to influence the quantity of urine, we apprehend ſuch enquiries muſt fall ſhort of producing any thing like preciſion; more eſpecially, as the nature of the food will alſo act conſiderably in the diminution or increaſe of this evacuation.

For theſe reaſons, we cannot adviſe any great dependence on ſuch rules; nor indeed do we conceive that they are of much importance. The exerciſe of common ſenſe, will lead us to diſcover if the diſcharge of water is ſo ſmall as to produce, or threaten inconvenience; and an immoderate increaſe of this evacuation will be ſtill more perceptible, and more alarming.

The ſeparation or ſecretion of the urine, and the diſcharge of it, are leſſened by a life of inactivity; exerciſe promotes both, and contributes to health in this way, as a regular and copious paſſage of urine not only prevents diſeaſes, but in ſome caſes cures them; ſoft beds, too many bedcloaths, and whatever excites too great a degree of perſpiration, decreaſes the quantity of urine; and heating, ſpicy food, and drying and aſtringent liquors, have the ſame effect; and ſuch as have reaſon to ſuſpect that this evacuation is inſufficiently performed, ſhould refrain from Port wine, claret, and whatever has a tendency to add to this complaint.

The formation of ſtones, and gravel in the bladder, may be chiefly attributed to the retention of urine, which ſtagnating, becomes thick; and the thinner parts being again withdrawn into the maſs of fluids, thoſe which are groſs and earthy remain behind, and harden into thoſe ſubſtances, which occaſion the moſt miſerable complaints; and thus habits of indolence, or employments which do not admit of activity of body, are productive of diſeaſes, from which thoſe whoſe inclinations and engagements lead them to the uſe of exerciſe in general eſcape.

The cuſtom of retaining urine for a length of time, in our attendance on divine worſhip, and at all places of public amuſement, is attended with very dangerous conſequences; and thoſe who feel an inclination to diſcharge it, ſhould not be reſtrained by motives of delicacy and decorum, which ought never to eſtabliſh rules prejudicial to health, and hazardous to life itſelf: the bladder will ſometimes loſe the power of action by over diſtenſion, and it is often by that means rendered paralytic, and unable either to retain or expel urine.

If the quantity of urine is too great, the body may be weakened even to a conſumption; and this will happen from drinking largely of ſmall and weak liquors, or from whatever tends to diſſolve the blood: for this diſeaſe, which is known by the name of *diabetes*, a proper regimen and medicines will be found under that head.

Perſpiration is of two denominations: inſenſible perſpiration, which is that fluid that is continually paſſing through the pores of the ſkin, ſerving to carry off all noxious humours, and ſuch as are uſeleſs to the human body; and ſenſible perſpiration, being the ſweat which is excited by labour, exerciſe, or medicine.

Different opinions prevail with reſpect to the quantity of inſenſible perſpiration; ſome deeming it the greateſt of all diſcharges; an idea widely differing from the doctrines of thoſe who conceive that three fourths of the liquids ſwallowed paſs off in urine; but however that may be, it is of ſuch importance to the health of the human body, that whilſt it is continued to be performed with regularity, we are in general free from diſeaſes, and the moment it meets with obſtruction, the whole frame ſuffers, and diſorder follows: nor are we ſo apt to attend to this evacuation as to the others, which are more perceptible; ſo that fevers, rheumatiſms, and a variety of other diſeaſes often attack us, without our ſuſpecting that they proceed entirely from obſtructed perſpiration.

It has been the opinion of many eminent phyſicians, that almoſt all the whole tribe of fevers and feveriſh complaints originate in colds; and if we except ſome few which are contagious, and others which may be epidemic, the apprehenſion appears to be well founded; which will more clearly appear, if we conſider that the firſt ſenſible operation of a cold is in a check or obſtruction of perſpiration, and if we reflect on the various ordinary circumſtances of life, which may be and frequently are productive of this evil.

The variety of changes which happen in this iſland, both in air and weather, are ſo great and ſo ſudden, that no precautions can poſſibly be taken to prevent the effects which it is obvious they muſt have on the ſtate of perſpiration: extreme heat and piercing cold ſucceed each other ſo quickly, that a man muſt carry his wardrobe about with him to be provided for the viciſſitudes; and the twenty-four hours of the natural day, frequently exhibit ſuch ſcenes of alternate ſummer and winter, ſunſhine and rain, as to baffle every attempt to accommodate our dreſs, or provide ſuitable ſhelter to protect us in the various exigencies of the fluctuating ſeaſons.

In ſuch a climate, the beſt caution is to harden ourſelves againſt the effects of theſe changes by expoſure; to venture abroad in all weather, however ſevere; and whilſt we remain in the houſe to admit a current of free air. Huſbandmen and other labourers in the open fields or grounds, frequently arrive at old age, without being ſubject to thoſe pains, coughs, oppreſſions of the breaſt, inflammations on the lungs, and other complaints of the like kind, to which thoſe who, from delicacy of habit, or neceſſary engagements, keep much within doors, are continually liable, on every expoſure to air and weather ſo changeable and uncertain.

But perſons of all conſtitutions, and in all ſituations, ſhould, as much as poſſible, avoid the air of the night, and more particularly in the ſummer, when the perſpiration has been copious in the day; the evening and the night dews which fall plentifully in this climate are extremely dangerous, and bringing on obſtructions, occaſion fevers and other diſorders, at a ſeaſon of the year when they are moſt commonly obſtinate and difficult to remove; and the effects of inattention in this particular, are ſeverely felt in low and marſhy countries, where great fogs prevail, and where the inhabitants are conſtantly afflicted with agues, aſthmas, quinſeys, and intermitting fevers.

Keeping wet cloaths about the body will certainly ſtop the perſpiration, though if they are removed before the warmth occaſioned by the exerciſe of working or travelling in the rain is gone off, ill conſequences ſeldom follow; and after a thorough wetting, we would recommend to begin the change with the feet and legs, which being generally firſt wet, ſhould therefore be dried before the other parts of the body: for which practice there is alſo a ſtill better reaſon, as wet feet are apt to occaſion very ſudden and dangerous diſorders in the ſtomach and bowels; ſuch as cholic, fluxes, and twiſting of the guts, as well as inflammations of the lungs and inteſtines.

When wet cloaths are taken off, the body ſhould be rubbed dry, which will effectually reſtore perſpiration, if an obſtruction ſhould have already begun to take place; and by this means, rheumatiſms, ſciaticas, and other tedious complaints, will moſt probably be prevented: but, above all things, never let the body cool with wet garments about it; if convenience does not offer an immediate change, keep in motion till neceſſaries can be procured, and avoid approaching the fire till you are perfectly dry.

The quality of water has alſo conſiderable influence in ſubjecting the human frame to obſtructions of perſpiration, and the contrary. Perſons who plunge or fall into rivers with their cloaths about them, are leſs liable to take cold than thoſe who are wetted by rain; and ſea-water ſeldom occaſions indiſpoſition, even to thoſe who are wholly unaccuſtomed to it: inſtances continually occur, of women, and others of the moſt tender and delicate habits, having their cloaths wetted by the ſea, either in parties of pleaſure, or on paſſages to and from the continent, without the leaſt conſequent inconvenience.

But of all the cauſes of obſtructed perſpiration, none is more common, nor any ſo much to be dreaded, as damp beds and damp ſheets: when the body is fatigued and exhauſted with the exerciſe of travelling, little attention is paid to the bed, ſo it be got ready to lie down; but the comforts and refreſhments of fire, food, and warm liquors, are eagerly ſought after; the conſequence is, that the perſpiration by theſe means is promoted and increaſed, receives a ſudden and fatal check from a damp bed or linen, rendered ſtill more pernicious by the uſe of a warming-pan, and the moſt alarming conſequences enſue.

Nor is it in inns alone that damp beds are to be expected; in almoſt every houſe, and particularly in the country, certain apartments are appropriated to the reception of viſitors, and the beds in theſe rooms perhaps are not ſlept in once in three months. Every one knows that feathers have a propenſity to acquire and retain moiſture, and therefore this cuſtom ſhould be aboliſhed; the ſervants of the family ſhould occupy every bed in turn, and ſuch as cannot be conſtantly uſed, ſhould be expoſed to ſun and air in the ſummer, and dried before the fire in the winter.

The infernal practices of putting travellers into ſheets which have been already uſed, and are either damp with ſweat, or moiſtened with water, in order to be made ſmooth and to appear like clean ones, are hardly leſs criminal than attempts to ſtab, and in general not leſs dangerous: the laws inflict penalties on thoſe who ſell unwholeſome meat or poiſonous liquors; but the ſlow, though not leſs certain murder, by damp or infected linen, may be committed with impunity. It is an admirable caution, for travellers to carry linen with them on long journeys, which they are then certain will be equally free from damp and infection: there is ſcarce an Engliſhman to be found, who has travelled much in his own country, but has at ſome time in his life ſuffered for want of attention to theſe articles.

Perſpiration is alſo frequently obſtructed by the ſituation and condition of houſes and ſleeping rooms: little regard is in general paid, in building a houſe, to the nature of the ſoil on which it is to ſtand; yet it is of great importance to health, that the conſtruction of a houſe ſhould be ſuited to the ſituation. Thoſe which are to be erected in beds of clay, or on ſpots full of water-ſprings, ſhould be lifted above the ground by arched cellars, a precaution which is not ſo neceſſary where the ſoil is ſtony, rocky, or gravelly. And even aſpect ought to be conſulted; houſes which are expoſed to north-weſt winds are ſeldom dry, and the inſide walls and wainſcots againſt ſuch expoſures, will be found covered with drops of water in damp and rainy ſeaſons.

Of a tendency ſtill more dangerous, is the inhabiting new houſes before the plaiſter is dry, and all the materials hardened and ſweetened. People are in general eager to occupy habitations which have been built by their own directions, or ſuitable to their convenience; but this ſort of impatience ought to be reſtrained; for they will not only incur the hazard of colds, coughs, inflammations of the lungs, and conſumptions, from the dampneſs, but the effluvia of paint, lime, &c. are of a very pernicious nature.

Certain pieces of houſewifery are alſo extremely prejudicial to health; ſuch as frequently waſhing the bed furniture, and putting it up from the cheſt or drawer without airing, on the arrival of gueſts; and the ſtill more common practice of waſhing the room on the very day before it is intended to be uſed. Few perſons can ſit in a room, the floor of which is wet, without feeling diſagreeable effects from it; and how much more ſenſibly muſt thoſe experience the inconvenience of this ſpecies of cleanlineſs, who are condemned to paſs a night in an apartment, rendered as unhealthy and noxious as a dungeon, by having every pore and crevice filled with water. Sleeping rooms ſhould never be waſhed but in dry weather, nor at any time in the day preceding their being occupied at night.

By whatever means an unuſual degree of warmth is excited, great care ſhould be taken how the body is permitted to cool; if it has been occaſioned by ſitting in a cloſe room, to ruſh into the air at once would be to incur certain danger, and in that caſe additional garments are abſolutely neceſſary. If the heat has been the reſult of labour or exerciſe, the exertion ſhould abate by degrees, that the perſpiration may leſſen gradually; ſudden tranſitions are by all means to be avoided, and a man who has been expoſed to a froſty air ſhould no more be permitted to approach the fire at once, than he who has been ſitting cloſe to it ſhould inſtantly venture abroad. Heat increaſes perſpiration, and accelerates the circulation of the blood: if either is ſuddenly checked, the conſequences will be unfavourable to health. Currents of air ſhould never be admitted through doors or windows of crouded or over-heated rooms; nor ſhould perſons who are about to go abroad, eſpecially at night, drink warm liquors: colds, coughs, and inflammatory diſorders, will certainly follow the neglect of this neceſſary reſtriction.

Leaving open the windows of bed-rooms at night is attended with danger, even in the hotteſt weather; and throwing off the cloaths, and reading or working at a window, is alike dangerous. When the windows and doors are to be opened, remove out of the immediate ſtroke of the wind, and rather go into a room that is cooled, than remain in one at the time the air is firſt admitted.

When the body is in a ſtate of high perſpiration, nothing can be more prejudicial than to drink ſmall and cold liquors: though the diſagreeable ſenſation of extreme thirſt is difficult to endure, yet to quench it with water or liquids of the like kind, is to get rid of one inconvenience at the expence of a much greater; for not only laſting hoarſeneſs, quinſeys, agues, and fevers, are the conſequences of ſuch acts of imprudence, but they have been actually known to occaſion immediate death. Frequent waſhing the mouth with water, or chewing acid fruits, ſwallowing only a ſmall part of the juices, will anſwer in ſome meaſure the purpoſe of drinking; but no conſiderable quantity of fruit or raw herbs ſhould be eaten whilſt the body is hot, for even theſe have a tendency to check perſpiration: a ſpoonful of ſpirits of any kind may be taken to allay thirſt, and perhaps this is the only caſe in which they can be recommended without being diluted with water.

But of all the acts of folly that can be committed in a ſtate of perſpiration, thoſe of bathing in the cold water, or even partial waſhing, are the moſt deſperate: from the former, nothing leſs can be expected than diſeaſes of the moſt fatal nature; and the latter indiſcretion hath in many inſtances been known to occaſion fixed colour, blotches in the face and on the limbs, aſthmas, ſuppreſſions, and the more tedious but leſs acute diſorders, which however ſlowly they advance, generally terminate fatally.

From the whole it will appear, that as the health and ſafety of the human frame depends principally on the regularity of this conſtant though frequently imperceptible evacuation, no caution ſhould be diſregarded which may tend to prevent it's being leſſened, checked, or obſtructed; and that however duly all the other animal functions may be performed, yet if this, the principal of them all, is impeded, health will ſoon give way, and diſeaſe appear in a thouſand different ſhapes.

CHAP. VIII.

Of the Communication of Infection.

THOUGH much, which might have been ſaid on this ſubject, has been anticipated under the article of *air*; yet we think it neceſſary to treat of it more particularly, before we enter on that part of our work which ſpeaks of the diſorders which are generally underſtood to be contagious: and as the prevention of diſeaſe is of all ſtudies the moſt pleaſing, becauſe the fruits of it are moſt advantageous to mankind; ſo we ſhall at all times feel more ſatisfaction in pointing out means to avoid the maladies to which human nature is ſubject, than in giving directions for the cure or alleviation of them. In the former caſe we are cheared with the reflection, that the higheſt of all bleſſings may, through our endeavours, remain uninterrupted; in the latter, our humanity ſuffers from the conſideration, that the patient muſt endure the pains of indiſpoſition, before he can avail himſelf of our attemps to offer him relief.

We have already ſtated the dangers which may ariſe from the cuſtom of burying the dead in churches, and in cities and towns, ſo far as it muſt be conceived to taint the air, and render it unwholeſome to thoſe who are compelled to breathe in it: we may now add, that it is of all others the moſt ready way to ſpread infection, and to communicate diſeaſes which demand the utmoſt efforts of human policy to avert.

It is not from the dead body alone, though in the higheſt ſtate of putridity, and frequently ſo offenſive as ſcarcely to be endured, that we are to expect infection: the nurſes, the friends, nay, even thoſe of the faculty who have attended the ſick in the whole progreſs of the diſeaſe, are frequently invited to the funeral; their bodies, their hair, and their cloaths, are imbrued with polluted air; acquaintance, alſo, who have not viſited the houſe during the illneſs, are ſummoned to grace the melancholy ſolemnity: the apartments are crouded, the rooms probably lighted up, warm wines and other hot liquors are liberally ſerved, perſpiration is promoted, and in this ſtate the whole aſſembly ruſh at once into the open air, and mingle with a ſurrounding multitude, drawn together by motives of unaccountable, but common curioſity. Can it be wondered that bodies ſo prepared ſhould themſelves receive infection, or that they ſhould communicate it to others?

From the houſe the body is conveyed to the church, either incloſed in a hearſe, or covered up with velvet; and the moment it is placed for the performance of the funeral rites, the coverings are in ſome meaſure removed, and all the peſtilential fumes which can iſſue from the corpſe through the crevices of the coffin are let looſe on a crouded congregation; a practice ſo abſurd, that it may be conſidered as a mode of offering ſacrifices to the remains of the deceaſed.

Viſiting ſick friends is generally conſidered as a mark of reſpect, but it too often proves a dangerous method of ſhewing our kindneſs: thoſe who by affinity or office are bound to attend the ſick, are themſelves liable to infection; ſtill more ſo are thoſe who come from the open air into a ſick chamber, with all their ſenſes acute and unblunted by the taints and ſmells which accompany all kinds of indiſpoſitions, and more eſpecially ſuch as are of a contagious nature.

Nor is the danger of retreating from the manſion viſited by diſeaſe leſs alarming; the uncommon and generally unneceſſary warmth of a ſick room excites an increaſed degree of perſpiration, and the ſtomach is nauſeated by diſagreeable ſmells: in this condition we venture abroad at once, the perſpiration is checked, and we ſwallow down large gulps of air; a refreſhment by this time abſolutely neceſſary. If under theſe circumſtances we eſcape the diſeaſe ourſelves, it is ſomewhat extraordinary; and we run the additional riſque of communicating it to our innocent and unſuſpecting neighbours.

Humanity revolts at the idea of ſeparating the ſick from the healthy, and providing hoſpitals or places of reception for the diſeaſed of all denominations, yet we ſubmit without murmur to the reſtrictions eſtabliſhed by law when the plague or peſtilence threatens us; and why putrid and ſome other ſpecies of fevers, which are frequently epidemic, and often highly contagious, ſhould leſs deſerve theſe precautions, remains yet to be determined. Certain it is, that ſuch regulations have been thought neceſſary in many well-eſtabliſhed ſtates and communities, and the Levitical law was peculiarly attentive to prevent defilement; by which, no doubt, was meant the ſpreading infection, either from communication with the diſeaſed, or the touch of dead bodies.

Bales of cotton, wool, unwrought ſilk, and other merchandize of the like kind, will eaſily receive, and for a long time retain infection: by ſome ſuch means hath this country been more than once viſited by the plague; and it remains on record, that it was at one time imported in the firſt-mentioned commodity. Lazarettos, and the performance of quarentine, are undoubtedly wiſe precautions; but as the uſe of the former is confined to thoſe who return from places ſuſpected, and the latter is only required under particular circumſtances, we apprehend there is yet room to extend ſuch wholeſome proviſions to caſes which do not fall within the immediate letter of the preſent laws; and in particular, we are of opinion, that ſome reſtraints are neceſſary to prevent the crews of ſhips which have been long pent up at ſea, or who have among them any appearance of putrid diſeaſes, from mixing immediately and indiſcriminately with ſociety.

The cuſtom of ſending ſervants from one family to another to watch by the ſick, though founded on commendable principles of friendſhip, is yet productive of very ill conſequences to ſociety; ſuch perſons are not only more liable to infection than thoſe who are in conſtant attendance, but they carry it with them to families who might otherwiſe run no riſque of receiving it. Though religious orders and vows of celibacy are very juſtly inadmiſſible in the Proteſtant ſyſtem; yet where ſuch inſtitutions prevail, we cannot but admire the humanity of rendering ſome of thoſe orders uſeful, by their being dedicated to the ſervice of the ſick; nor can we withold our approbation from the policy of the order of Malta, which has not only provided a palace for ſuch as are wounded in it's defence, where they are ſerved in a ſtyle of ſuperior elegance, but are attended by the knights themſelves in perſon: ſuch treatment will naturally inſpire thoſe who fight under their banners with an extraordinary degree of ſpirit and reſolution.

With us, the office of nurſing the ſick is either divided among our acquaintance and their ſervants, or conferred on perſons, from age, infirmity, or ignorance, very unfit for the duty. Perhaps ſome regular eſtabliſhment of nurſes, to conſiſt of ſuch only as are of approved tenderneſs and ſobriety, under fixed and regular wages, to be paid in particular caſes out of ſome public fund, might contribute to the comfort and ſatisfaction of the ſick, and to the ſafety of the uninfected.

Nurſes and medical attendants on the ſick ſhould uſe every precaution to avoid infection themſelves; whenever they approach the bed, their noſtrils ſhould either be ſtopped with tobacco or ſome aromatic herb; and keeping the patient clean, admitting freſh air into the room as often as poſſible, and ſprinkling it with hot vinegar, or conveying into it the fumes of that acid, will contribute to prevent infection: ſuch perſons as are engaged in neceſſary offices about the ſick, ſhould alſo be extremely cautious of their communications with thoſe who are in health, and in particular ought to waſh their hands and faces, change their cloaths, and go into the open air the moment they leave the ſick room, and before they mix with the healthy.

General rules to avoid infection are uſeleſs, becauſe thoſe who lay them down muſt be ſenſible how very ſeldom they apply: to adviſe men to inhabit the country on this account, rather than towns or cities, is to direct the depopulation of all capital places, and to ſubvert all the purpoſes for which ſocieties were firſt drawn together; to give ſerious cautions againſt living in narrow or confined ſtreets, is to ſuppoſe that every individual is at liberty to chuſe his particular place of abode; and to admoniſh mankind to avoid ſtaying within doors, and keep much in the open air, is to bid the mechanic and the artiſt relinquiſh the employments to which they have been bred, and on which depend the exiſtence of themſelves and their families. We do not, therefore, mean to recommend impoſſibilities; but we ſhall exhort our readers to refrain from approaching infected places, from viſiting the ſick through motives of curioſity or reſpect, and from attending the funerals of ſuch as die of contagious diſeaſes: theſe are precautions which men of all ranks and conditions may uſe, and we apprehend will be found of great importance in eſcaping from infection.

CHAP. IX.

Of the Means of diſcovering the Natures of different Diſeaſes, and of adapting Methods of Cure.

THOUGH we have endeavoured to give an exact deſcription and account of the ſymptoms which attend each diſeaſe, as it occurs in the courſe of this work; yet there are ſome obſervations which reſpect them all, and which thrown together, may ſerve as a general light to guide us in all our enquiries and attempts to form proper judgments of the natures and appearances of different diſorders.

And here it may be neceſſary to obſerve, that the ſame diſeaſe is not always marked by the ſame ſymptoms or appearances, but that theſe differ very conſiderably in different ages, conſtitutions, and ſexes; and depend alſo, in many inſtances, on manner of life, and temper and diſpoſition of mind: and that from hence it will frequently happen, that thoſe who are conſtantly and immediately about the perſons of the ſick, are capable of aſcertaining the approaching diſeaſe with more accuracy, from their own obſervations, than medical aſſiſtants, who are generally called in after the ſymptoms have made ſome progreſs, and often after their appearance has been changed, and who are many times ſtrangers to the patient's habit of body, and have no other information on that ſubject than they can derive from enquiry, which is commonly uncertain, and ſometimes unintelligible.

Beſides, the different ſtates of the bodies of young patients, and thoſe of a more advanced age, will not only occaſion different ſymptoms; but will require different and even oppoſite treatment; and the female ſex, who are delicately framed, and their nerves more eaſily affected than thoſe of men, are unable to bear the ſame copious evacuations, or warm and ſtimulating medicines; and the like diſtinction will appear between thoſe whoſe employments are moſtly within doors, and afford but little exerciſe, and thoſe who by labour of a more athletic nature, and by conſtant expoſure to air and weather, acquire habits more hardy, robuſt, and vigorous.

We have already noticed, that different climates will not only produce different diſeaſes, but will alſo occaſion a very material variation of ſymptoms; and even in nearly the ſame climates, ſituations high or low, expoſed or confined, will have a very conſiderable effect on the appearance of diſeaſe. It may therefore be right to enquire in what manner thoſe who have ſuffered the ſuppoſed diſorder in the ſame neighbourhood have been affected in the ſeveral ſtages of it; nor ſhould particular enquiry be omitted as to the occupation of the patient, as we have before pointed out many trades and employments in life which ſubject men to particular diſeaſes, and good intelligence on this head will be equally uſeful in diſcovering the nature of the diſtemper, and pointing out proper methods of cure: the ſame diſeaſe in different conſtitutions, and ariſing from different cauſes, may require very different management, and more particularly with reſpect to regimen, which in moſt caſes we are inclined to think of more conſequence than medicine; and eſpecially when an early diſcovery of the diſeaſe will enable us to combat it before it has arrived to any great degree of malignancy.

Medicine, though in many caſes indiſpenſibly neceſſary, may for want of our being able to judge of the nature of the diſeaſe, be extremely prejudicial; and whenever adminiſtered in any conſiderable quantity, particular obſervation ſhould be made whether any peculiar part of the compoſition ſeems to diſagree with the patient; and it will be prudent to enquire, whether he has ever had the ſame kind of diſeaſe before, what ſteps were then taken, and whether any certain drug or medicinal preparation has produced ill effects, or the contrary; by theſe means we may ſometimes attain a method of cure, which our own judgments may not ſuggeſt.

With reſpect to regimen, the beſt directions will ariſe from knowing and attentively conſidering the caſe before us, and reaſon will then prove the ableſt guide. If the ſymptoms of a fever are inflammatory, gruels, wheys, herb-teas, and infuſions, are not only proper food, but in general ſupply the place of all medicine; and in ſlow, putrid, or nervous fevers, where cordials are neceſſary to ſupport the ſick, that purpoſe will be better anſwered by ſago, jellies, and a proper quantity of good and generous wine, than by all the juleps of an apothecary's ſhop.

Diſeaſes of ſlower progreſs demand no leſs attention in the article of diet; a courſe of vegetables hath been known to remove an inveterate ſcurvy, when all the materials of phyſic have failed of ſucceſs: wind, hypochondria, and nervous complaints, have been frequently expelled by a more liberal uſe of ſolid food and good liquors; and a milk diet hath often reſtored the patient to health, in the very advanced ſtages of a conſumption.

Air and exerciſe are of no ſmall importance when the nature of the diſeaſe is aſcertained: in the ſmall-pox and other fevers, thouſands have periſhed under the old practice of excluding air; and that which now prevails, of admitting it, under proper regulations, into the chambers of the ſick; nay, in the former diſeaſe, carrying the patient into the open air; has been attended with the two-fold advantage, of contributing in a wonderful manner to the recovery of the diſeaſed, and leſſening the danger of communicating the diſtemper to others.

Exerciſe is generally recommended as an endeavour to regain ſtrength after the body has been reduced to weakneſs by the ſeverity of ſome diſeaſe; but there are many diſorders in which it ſhould be uſed to obtain a cure. Riding on horſeback has removed glandular complaints in many inſtances, and a voyage at ſea has been known not only to ſtop the progreſs of an apparently confirmed conſumption, but actually to reſtore the patient to perfect health. In complaints which are occaſioned by relaxation, ſwimming may prove extremely beneficial, adding to the effect of the cold-bath the exerciſe of the limbs, and in particular opening the cheſt by the continued regular motion of the arms.

Nor is cleanlineſs to be omitted in our attempts to render the uſe of medicine leſs neceſſary. Dirty cloaths about the ſick, not only add to the diſcomforts of their ſituation, but very often to the danger; as that perſpiration which nature intended to carry off noxious humours, is frequently taken back again into the body, and actually contributes to ſupport the diſeaſe: nay, there are ſome diſorders which may be totally removed by cleanlineſs, and none in which it is not of important uſe, both to the patient himſelf, to thoſe about him, and to the community at large, as the degree of infection is always proportioned as well to the care taken in this reſpect, as to the malignity of the diſorder.

We ſhall conclude this chapter with a general obſervation, that a ſtrict regard to regimen will in many caſes render medicine wholly unneceſſary, and in all contribute to leſſen the occaſion for it; and that the effects of precaution in thoſe matters which are within the knowledge of every individual, are always more certain than the operation of phyſic, which depends in many inſtances on conſtitution, and in others, on circumſtances which the utmoſt human penetration may be unable to diſcover.

BOOK III.

Of Diſeaſes incident to grown Perſons.

CHAP. I.

Of Conſumptions.

THIS diſeaſe generally ariſes from ſome accidental cold which occaſions a cough; and this cough, if neglected, acquiring force from frequency and long continuance, confirms the tendency to inflammation, which muſt firſt have attacked the lungs in ſome particular part.

Conſumptions are deſcribed of ſeveral diſtinct kinds; ſuch as the *inflammatory*, which is occaſioned by ulcers on the lungs, and this is alſo called the *pulmonary conſumption*; *phthiſical*, which proceeds from obſtructions; and *atrophical*, when produced by an exceſs of any of the natural ſecretions: but the ſeat of the conſumption is in the lungs, and is ſaid to be in the air-veſſels, and not in the blood-veſſels; and ſometimes one lobe of the lungs only is affected, and in other caſes both.

Though this diſorder makes it's firſt appearance in the form of a cold, yet the original cauſes may be more remote; ſuch as an hereditary diſpoſition, weak lungs, relaxed fibres, an ill figure or conformation of the breaſt, or of thoſe parts which it contains; a narrow and flat cheſt, a long neck, or deformity of body: whatever tends to inflame the breaſt, or vitiate the humours, muſt likewiſe be conſidered among the cauſes of conſumptions, which is the reaſon that they frequently follow other diſeaſes, ſuch as the king's evil, the venereal diſeaſe, ſmall-pox, meaſles, aſthma, &c. but in thoſe caſes the lungs are not ſo remarkably affected.

Conſumptions may alſo ariſe from violent paſſions; ſuch as grief, diſappointment, anxiety, or the like; and alſo from extraordinary exertions either of labour or intenſe ſtudy.

From exceſſive evacuations of any kind, either of perſpiration, ſtool, or urine: in women, from too frequent and copious natural diſcharges; and in both ſexes, from too great an indulgence in the propenſities of nature.

From a ſudden ſtoppage or check either of cuſtomary evacuations, or of particular ones; ſuch as bleeding at the noſe, or from the piles; ſweating of the extremities, iſſues, or perpetual bliſters; and from improper applications to repel pimples or eruptions.

External injuries, ſuch as blows and bruiſes, particularly ſuch as are received on the breaſt or ſtomach, will occaſion conſumptions.

Workmen and artificers in certain occupations are alſo peculiarly liable to conſumptions, as we have already mentioned in our chapter on that ſubject.

Debaucheries of every kind, gluttony, and unſeaſonable hours, are deſtructive enemies to the lungs; few *bon vivants*, or jolly fellows, eſcape from diſorders in thoſe organs of life.

Damp beds, rooms, and houſes; wet feet, night air, and a ſendentary or confined courſe of life; diſpoſe the body to be liable to colds, which are frequently the forerunners, if not the cauſes, of conſumptions.

This diſeaſe has been alſo held to be infectious; at any rate it will be always adviſeable to avoid ſleeping with the ſick, which without being of any advantage, to the patient may probably endanger the healthy.

Another cauſe is the ſuckling of children longer than the mother's ſtrength will allow; a caſe which often occurs in the middling claſſes of life, and in tender and delicate conſtitutions, where prompted by maternal tenderneſs, or a deſire to diſcharge this duty in it's fulleſt extent, they give the breaſt to the infant till their own health is impaired: and in ſuch a ſituation, the ſlighteſt cold occaſions a cough, which ſoon brings on a conſumption; the diſeaſe is too often communicated to the child, and thus the lives of both may be ſacrificed to miſtaken and over-acted affection.

From fifteen to thirty-five is the time of life moſt ſubject to conſumptions; the blood is then in it's greateſt fervour, and the lungs diſpoſed to be affected by all or any of the cauſes we have juſt mentioned.

The ſymptoms of this diſeaſe are a cough, by which the lungs are firſt lacerated or torn, and then ulcerated; a fever particularly troubleſome in the night, when the cough alſo comes on with increaſed violence; ſpitting blood, ſickneſs, and an inclination to vomit after eating; continual heat, pain, and oppreſſion of the breaſt; loſs of appetite, depreſſion of ſpirits, inactivity, and reſtleſſneſs: the ſpittle is of a ſaltiſh, diſagreeable, and offenſive taſte; the pulſe ſoft and ſmall, but generally quick; and the voice becomes ſhrill, yet loſes it's ſweetneſs.

As the diſeaſe advances, the ſymptoms are more violent and deciſive; the patient begins to ſpit matter at firſt ſtreaked with livid or green, and afterwards white; his breathing becomes extremely difficult, his cheeks fluſhed; the palms of his hands and ſoles of his feet violently heated; profuſe and waſting ſweats alternately ſucceed each other in the morning and at night, accompanied with a flux and exceſſive diſcharge of urine.

In the laſt ſtages of conſumptions, the fingers become ſmall and remarkably taper, the nails loſe their elaſticity, and being bent inward, retain that poſition; the hair begins to fall off, the legs and feet ſwell, the eyes become dim, and a difficulty of ſwallowing, and coldneſs of the extremities, give tokens of approaching death.

Yet under the preſſure of ſo many ſymptoms of mortality, conſumptive patients are frequently chearful in the intervals of fever or pain, and the remiſſions of the cough, and conſtantly flatter themſelves with the pleaſing hope of recovery. When the nerves are affected, and in hypochondriac diſorders, there is always a ſinking and deſpondency; but in conſumptions the decay firſt affecting the fleſhy and muſcular parts, proceeds ſo gradually as ſcarce to alarm the mind, and the patient often lingers on to the laſt ſtage of the diſeaſe before he entertains the leaſt apprehenſion of danger; and this fatal ſecurity frequently leads him to the brink of the precipice, before he diſcovers that his fall is inevitable, and prevents his ſeeking advice till it is too late to derive benefit from it.

We have already, in various parts of this work, pointed out the cautions neceſſary to be obſerved to prevent this fatal though deluſive diſeaſe, and to theſe we need only add our earneſt advice to our readers, never to neglect the leaſt tendency to it, which always appears in an obſtinate cough; but to betake themſelves immediately to proper regimen, which will in many, perhaps we may venture to ſay in moſt caſes, effect the cure of this diſorder, if it is taken in ſeaſon; but if it is ſuffered to proceed till the conſtitution is ſhaken, it ſcarce ever fails to prove fatal, in ſpite of every exertion of art, and all the powers of medicine.

The effects of regimen in caſes of this ſort have been ſo extraordinary, that by ſtrict attention to it, perſons apparently conſumptive have paſſed through lives of conſiderable length without having all the ſymptoms removed, and without their being increaſed to any degree of violence.

In the *pulmonary conſumption*, or that wherein the lungs are principally affected, the inflamed veſſels being either diſſolved into matter, or forming with the juices they contain a ſchirrous or warty tumor, ſome portion of the lungs becomes unfit for the uſe of circulation: if this obſtruction is ſmall, it may remain without much increaſing, under the regulations of great care, during the patient's life; if it is large, and a conſiderable part of the lungs injured, the diſeaſe is every moment aggravated, whether it be by inflammation tending to the production of matter, or by the formation of thoſe warty pimples or ſubſtances, which we have juſt deſcribed, rendering a portion of the lungs impervious; for as the ſame quantity of blood muſt neceſſarily paſs through the lungs when a portion of them is obſtructed, as when they were in perfect health, it follows that the action and re-action of the ſolids or veſſels, and the fluids which they contain, muſt be increaſed in proportion to the extent and ſituation of the parts affected, and to a degree inconſiſtent with the ſafety of this organ.

Hence it will appear, that if by ſuch a regimen as will prevent the circulation of the blood from being haſtened or urged on with any extraordinary impulſe, the increaſe of the diſorder may be ſtopped, or the conſequences ariſing from this obſtruction be rendered leſs troubleſome, life may be prolonged for a very conſiderable period, even ſhould no hope remain of entirely removing the diſeaſe, which may always be expected if proper meaſures are adopted in the early ſtages of it.

Air and exerciſe are the firſt great articles. Change of air is of ſo much conſequence in all diſeaſes of the lungs, that when it has been from a good air to a worſe, it has in ſome inſtances been found ſerviceable. Narrow cheſted and aſthmatic perſons will ſometimes breathe better even in the cloſe parts of the metropolis than they could in the country; but in conſumptive caſes, the air of all large and populous places has been proved by experience to be injurious: when the patient is adviſed to a change of air, it becomes an important object to point out the moſt proper change, and to enforce it without delay.

In almoſt every part of England, particular ſpots have acquired reputation for ſalubrity of air and healthineſs of ſituation; and thoſe will generally be found to be on dry and gravelly ſoils, open to the gentler gales, but ſkreened by ſuperior eminences from the rude blaſts of keen north-eaſt winds; where the water is pure and light, and where well ſheltered and pleaſant walks and rides may invite the patient to ſpend great part of his time abroad, without hazard of being caught by ſudden rains, or expoſed to cold and penetrating weather. And if we take a view of thoſe which are uſually recommended for this purpoſe in the vicinity of London, and point out the accommodation of them to times, ſeaſons, and circumſtances attending the ſick, the ſame deſcriptions, and the ſame uſe of them, will apply to other different parts of theſe kingdoms. The airing places of other climates will be noticed under the heads of *diſeaſes peculiar to different countries.*

This metropolis is ſurrounded on all ſides, except the weſt, with a ridge of eminences approaching within a few miles of it; on the north, Highgate and Hampſtead; on the north-

north-eaſt, Epping Foreſt and Enfield Chace; and on the ſouth-eaſt, Blackheath, Clapham, and Putney Heaths: towards the weſt the plain extends with few elevations to Egham and Bagſhot Heath. The ſummits of the ſeveral hills we have mentioned, being comparatively high grounds, are expoſed to the ſharp winds which blow from the north and north-eaſt, and therefore early in the ſpring, whilſt theſe winds are accuſtomed to blow violently and almoſt conſtantly, ſuch ſituations are certainly unfriendly to complaints which indicate an approaching conſumption.

But to the ſouthward, the ſouth-eaſt, and the weſt of London, as Chelſea, Fulham, Batterſea, Camberwell, Peckham, Brompton, Kenſington, and ſome parts of Lambeth, are dry and ſheltered vales, undoubtedly very proper in the earlier ſeaſons of the year.

As the ſummer advances, the higher ſituations may become more adviſeable, and at this ſeaſon of the year, the marſhy lands on the banks of the Thames, or the garden-grounds of Batterſea and Fulham, which then abound with the moſt putrid exhalations, both from very offenſive manure and corrupted or rotten vegetables, would be as improper as the bleak hills of Hampſtead and Highgate, or the ſtill ſharper air of Blackheath in the winter. Iſlington, the uſual airing place of the city, is too much expoſed to north-eaſt blaſts in the ſpring, and to the ſmoke of the city, driven upon it by the ſoutherly winds which generally prevail in the ſummer.

Nor muſt we be altogether indifferent in our choice of ſituations, whether we recommend our conſumptive patients to journey eaſt or weſt, north or ſouth, from the metropolis; the atmoſphere of ſmoke and exhalations, which generally hangs over it, and forms a cloud which extends miles beyond even the limits of the extremeſt ſuburb, is driven in the direction of the winds which prevail in the ſeveral ſeaſons. In the ſummer it is puſhed by the ſoutherly and ſouth-weſt winds to the northern or north-eaſt quarters, where that penetrating ſoot, which is commonly called *the blacks*, falls in ſuch ſhowers, as to ſoil the whole face of the country. In the winter and ſpring, whilſt northern and north-eaſt winds prevail, this heavy atmoſphere moves to the oppoſite points, and has been remarked to ſoften the rigours of the winter winds, which paſs through it to ſuch a degree, as to bring the vegetation in the ſouth and ſouth-weſt quarters at leaſt a fortnight more forward than it is found in ſimilar ſituations to the north and eaſt.

It is not enough, therefore, to recommend air; it muſt be taken where it is moſt ſalutary, and received at proper times and ſeaſons: when the freſh air of the day may be refreſhing and highly beneficial, that of the night would be noxious and injurious; and every precaution is worth attending to where life itſelf is concerned.

Briſtol is generally recommended in conſumptive caſes, for the ſake of the double advantage of excellent air and water, which has always contributed at leaſt to the eaſe of the patient, if it has failed of effecting his recovery. When great benefit has been received at Briſtol, we are apt to attribute the cure in ſome meaſure to the journey alſo, which we believe to be in many caſes highly contributory to the cure of this diſeaſe; and, perhaps, if it was cuſtomary to recommend reſiding at different parts of the kingdom at different ſeaſons of the year, ſpending the winter near the weſtern ſhores of the kingdom, and returning as the ſummer advances to the eaſtern and northern parts, avoiding by theſe means the extreme ſeverities of the cold and hot ſeaſons, nearly the ſame advantages might be derived from ſuch a preſcription, as from a voyage to the continent; I mean, ſuch a voyage as is only undertaken with a view of finding a milder climate, and avoiding the piercing cold ſo injurious to tender breaſts. Whoever has obſerved the myrtles and other plants of tender growth in Devonſhire and Cornwall, flouriſhing amidſt the ſevereſt rigours of winter, which are felt in thoſe counties, will be eaſily induced to believe that the ſituation would be equally favourable to the human body labouring under complaints which call for indulgent ſeaſons and a warmer ſky.

Nor are thoſe countries without the advantages of medicinal waters, although their remoteneſs from the capital hath hitherto prevented their being brought into uſe and reputation: ſhould the idea we have ſuggeſted, be at any time thought worthy of improvement, there can be no doubt but air and ſituations might be found which, though not altogether ſo ſalubrious and warm as thoſe of Montpelier and Nice, may yet afford conſiderable benefits to thoſe whoſe circumſtances do not permit them to ſeek the advantages of diſtant climates, or who for want of reſolution to combat the ſuppoſed dangers of the ſeas, and the difficulties of foreign travelling, ſubmit to the advances of the diſeaſe, without an attempt which might probably produce actual recovery.

But when change of air, or change of climate are recommended with any hope of actually removing the diſorder, the advice muſt be put in practice without delay; it is in the early ſtages of it only that ſucceſs may be expected to attend theſe meaſures: when the lungs are obſtructed to a violent degree, or the matter has been copiouſly received into the blood, journeys or voyages anſwer little other purpoſe than to harraſs the already exhauſted patient, and drag him to breathe his laſt remote from his friends, and deprived of the comforts and conveniences of his own habitation.

Nor do we apprehend the change of climate to any one particular ſpot, ſo likely to be productive of benefit, as adopting the ſame plan which we have already offered for our excurſions nearer home: at certain ſeaſons Portugal is too hot, Nice damp and foggy, and the air of Montpelier ſharp and penetrating. The atmoſphere in the neighbourhood of Naples is with ſome winds too heavily loaded with ſulphur, and others blow ſuch peſtilential blaſts, as to threaten deſtruction to the moſt perfect health, and the ſoundeſt conſtitution.

If we were to recommend a tour of health for a conſumptive habit, where the diſeaſe had only threatened, or the effects of it had not yet taken place in any great degree, we would adviſe the patient to ſpend the ſummer on the weſtern coaſts of England, or the oppoſite ſhores of France; the winter in the ſouthern provinces of that kingdom, the ſpring in Italy or the kingdom of Naples, and the ſucceeding ſummer in ſome of the cool vales of Piedmont or Savoy: and we are of opinion, that ſuch a journey undertaken in ſeaſon, and purſued with care and attention, would very probably effect much more than a continued reſidence in any one ſpot, however celebrated; in this diſorder the appetite acquires from the diſpoſition of body a perpetual deſire of variety, and the gratification of it may be as eſſential in air and weather, as in food or liquors.

But we are inclined to believe, that a ſea-voyage of conſiderable length, would be ſtill more likely to promote the cure of this lingering malady; ſea-ſickneſs often proves highly beneficial to the conſumptive as well as the air of the ſea: theſe caſes are not only frequently attended with an impaired digeſtion, but alſo with a redundancy of bile; and perhaps the emetic operation of ſea-ſickneſs may cleanſe the firſt paſſages, and be of very ſingular uſe.

Experience, indeed, hath in many inſtances convinced us of the ſalutary effects of voyages by ſea; we know one of a young lady, who after being very far advanced in a confirmed conſumption, and receiving conſiderable relief from an accidental long paſſage to the continent, continued to voyage,

age, not only from port to port in Europe, but even acroſs the Atlantic, for ſeveral years, enjoying, during her continuance at ſea, the moſt perfect health, but relapſing again as often as ſhe remained long on ſhore; a neceſſity for which, at length happening, from contrary winds or foul weather, the progreſs of the diſeaſe became ſo rapid as to carry her off before ſhe could again betake herſelf to that element, which ſeemed ſo congenial to her conſtitution.

Thoſe who have reſolution enough to attempt this method of cure, ſhould provide themſelves with ſuch a ſtock of living freſh proviſions, and ſuch vegetables and fruits, as will bear keeping, that they may incur no hazard of being reduced to ſalt meats during the courſe of the whole voyage; nor will the keeping a cow on board a ſhip, for the benefit of the milk, be attended with much difficulty; at any rate, goats may be carried; and if a quantity of proper dried herbage be provided for them, the milk will be at leaſt equal in medicinal goodneſs to that of cows.

The benefit of exerciſe in this diſtemper has been ſtrongly urged by every phyſician who has preſcribed for it, and every writer who has treated of it; yet ſuch cautions are frequently omitted, as may be abſolutely neceſſary to prevent this great auxiliary from being abuſed, or being uſed in ſuch a way, by conſumptive patients, as to prove more injurious than beneficial.

The beſt exerciſe that can be taken, is riding on horſeback; and moderate journeys in temperate weather are of excellent uſe in conſumptive caſes: but the ſeaſon and hours for riding ſhould be conſulted; in ſharp, damp, cold, or foggy weather, late at night, or too early in the morning, conſumptive perſons will find even this exerciſe prejudicial, and the diſeaſe will be increaſed by any indiſcretion in this particular.

If the patient cannot bear this kind of exerciſe, he muſt ſeek it in ſome vehicle; but it ſhould be as open as poſſible; care being taken in this way of moving, as well as on horſeback, to avoid the riſques of being wet, or violently affected by any of the ſudden changes in the air and weather, to which this climate is ſo liable.

In uſing exerciſe either way, it ſhould be ſo diſpoſed as to create variety; the ſame ride repeated will ſoon tire, and when it ceaſes to be pleaſing, it will be no longer uſeful: journies, therefore, are to be preferred before rides, but both ſhould be compleated before dinner; riding on a full ſtomach will rather do harm than good.

But above all things, exerciſe ſhould be enforced in the early ſtages of this diſeaſe: as it gains ground, and the body becomes weak, a total diſinclination to motion takes place; and the pain and fatigue with which it is accompanied, ſerve rather to harraſs the patient than to benefit him. Of all chronic or lingering diſorders, none requires ſuch early attention as a conſumption: in the firſt ſtages it may frequently be effectually cured, and always relieved and alleviated by regimen alone; as it advances, the difficulties are increaſed; and when it has been ſuffered to prevail in a very conſiderable degree over the conſtitution, it not only refuſes to yield to our cooperations with nature, but frequently (indeed, generally) ſets at defiance the efforts of medicine; which, however advantageous at certain periods of this diſeaſe, will be found wholly inefficacious when the ſymptoms are aggravated to ſuch a degree as to leave no hope from air, exerciſe, and a proper regulation of diet. Medicine and regimen muſt go hand in hand to the cure of conſumptive caſes; and when the latter becomes uſeleſs, little expectation of ſucceſs can be formed from the former.

But air and exerciſe alone will not be ſufficient to effect a cure; a regulation of diet demands our attention, and indeed is indiſpenſible in conſumptive complaints. Perſons labouring under this diſorder ſhould uſe no food of a heating nature, or which is hard of digeſtion; the animal food ſhould be taken in ſmall quantities, and of thoſe kinds the fleſh of which is white and light: the drink ſhould be alſo cooling, and vegetables and milk ſhould conſtitute the greater part of the patient's ſuſtenance; but even in the uſe of theſe, the conſtitution and habit of body ought to be conſulted; for whatever produces ſickneſs or griping, muſt be omitted without heſitation.

Milk diet alone has been recommended as almoſt infallible in the cure of this diſeaſe; and, perhaps, it has in many inſtances ſucceeded even beyond expectation.

Of all milk (except the milk of a woman's breaſt drawn by the patient himſelf) aſſes milk is eſteemed moſt ſalutary; if this can be obtained in ſufficient quantities, (for a ſmall quantity can be but of very little uſe) it may conſtitute a principal proportion of the patient's food, at leaſt of the liquid part of it; drinking half a pint in twenty-four hours can produce but a very trifling change in the humours, nor indeed will either ordinary patience, or a common conſtitution, hold out to wait a cure which is to be produced ſo ſlowly: and it is owing to it's not having a fair trial, that this medicine in many caſes loſes it's reputation, and is laid aſide as inefficacious; an idea which is alſo frequently heightened, by it's not being adminiſtered till the diſeaſe is in much too advanced a ſtate to receive benefit from any application.

But in obſtinate coughs, and conſequent pains in the breaſt, which threaten, and if not checked in time, would certainly occaſion confirmed conſumptions, aſſes milk will produce very extraordinary effects, and in moſt caſes prevent the formation of matter on the lungs; but if the ulcers are already formed, it can hardly be expected to ſucceed.

Aſſes milk ought to be drank immediately as it is milked from the beaſt, in quantity (for a grown perſon) not leſs than half a pint at a time, and repeated four, or at leaſt three times in the twenty-four hours, at proper diſtances: ſome recommend eating a bit of bread or biſcuit with it as often as it is taken, but this muſt depend principally on the patient's appetite. Inſtead of giving it whilſt he remains in bed, we apprehend the better time is juſt before he is about to uſe his exerciſe; if it ſhould occaſion purging, that quality may be corrected by adding a ſmall quantity of conſerve of roſes or powder of crabs claws.

Next to aſſes milk, that of goats ſeems moſt ſuitable; cow's milk, though not ſo eaſily digeſted as the others, may yet be uſed to very conſiderable advantage, if mixed with an equal quantity of barley-water; and feeding the animal, whoſe milk is to compoſe the ſick perſon's diet, on particular ſorts of herbage, has been ſuggeſted as a method of adding the virtues of thoſe herbs to that of the milk; or perhaps this purpoſe may be anſwered with much leſs difficulty and greater certainty, by mixing infuſions of theſe herbs with the milk, inſtead of barley-water.

But a milk diet will not ſuit every conſtitution; there are ſome with which this nutriment, excellent as it is in conſumptive caſes, ſeems to diſagree; if this is occaſioned by a proneneſs to generate bile, or too ſtrong a tendency to acidities from weak organs of digeſtion, in the latter caſe lime-water may be added to the milk, and in the former it is probable, that whey from the milk of cows or goats would agree beſt. We ourſelves knew a gentleman who had recovered from a confirmed conſumption to perfect health, by the uſe of goats milk whey, which he drank in large quantities for ſeveral months; retiring for that purpoſe to the Highlands of Scotland, where he was out of all danger of being tempted to deviate from a regimen of which he had entertained the higheſt opinion, and which indeed was fully juſtified by the event.

But the common addition of rum or other ſpirits to milk, is by no means to be recommended; ardent ſpirits heat a frame already diſpoſed to fever, and coagulate the milk, anſwering the purpoſes of deſtroying the beſt qualities of the medicine, and increaſing the moſt troubleſome part of the diſorder.

And when we adviſe a milk diet, we do not mean to enjoin an immediate departure from every other kind of food or liquors to which the patient has been accuſtomed, or to confine him at all to this liquid only; a change ſo ſudden and violent might be attended with danger: it may be right to eat of light animal food once a day; by degrees to drop the fleſh, for the broth of chickens, veal, or lamb; and gradually to omit the uſe of even animal juices. And the ſame methods may be taken to break off the uſe of wine, diluting it with water in augmented proportions, till it can be altogether diſuſed without inconvenience.

But the ſooner the patient can be brought to bear a diet chiefly of milk and vegetables, the better will be his proſpects of ſpeedy and perfect recovery: this diet ſhould be compoſed of every variety which is conſiſtent with the idea; ſuch as rice-milk, barley boiled in milk, puddings made with milk, ripe fruits of all kinds in tarts or puddings, jellies of all ſorts of fruits, and the fruits themſelves in conſerves, marmalades, and preſerved with ſugar.

To this diet may be added moſt ſorts of ſhell-fiſh: oyſters in particular have been found highly beneficial, more eſpecially if the patient is much reduced in ſtrength or ſpirits; in which caſe it may be alſo neceſſary to allow rich broths, jellies, and the like; but care ſhould be taken not to oppreſs the lungs by an overcharge of chyle, from giving the patient conſiderable quantities of any kind of nutrition at once, which may accelerate the circulation of the blood, and of conſequence add to the cauſe of the diſeaſe. Conſumptive perſons ſhould feed like infants, often, but little at a time.

The caution which is ſo often, and generally ſo unavailingly repeated in other diſorders, may with great propriety be applied in conſumptive caſes; *let the mind be kept as eaſy, undiſturbed, and chearful, as poſſible.* Conſumptions frequently originate in grief, diſappointment, or a melancholy turn of mind; therefore, mirth, variety, and whatever tends to inſpire chearful thoughts, muſt be beneficial; but this advice, as we have before obſerved, is more properly addreſſed to the friends of the patient than himſelf, and humanity and affection will induce them to uſe every endeavour to prevent his adding to the calamities of ſickneſs, by brooding over the misfortunes which may have occaſioned it.

The uſe of the Briſtol waters is always recommended in conſumptive caſes, but the preſcription in general comes too late; if the patient is ſent thither before the diſeaſe is confirmed, and in the very firſt approaches of it, great benefit may be derived both from the journey and from the waters; which taken freſh at the pump, do certainly contain principles conducive to the recovery of perſons affected with conſumptive complaints, and eſpecially thoſe of the pulmonary kind, or which are occaſioned by ulcerated lungs. But the misfortune in general is, that either the phyſician flatters himſelf that he can effect the cure without this aſſiſtance, or the patient will not be convinced of the neceſſity of the journey, till it is more likely to prove detrimental than ſalutary: and thus, from falſe hopes of the one, or the want of determination in the other, the precious moment ſlips by, and the unfortunate patient falls a ſacrifice to the delay; or alarmed by the advances of the diſeaſe, and the opening apprehenſions of danger, he yields to the intreaties of his friends, and waſtes the little remains of his ſtrength in fruitleſs fatigue, bringing with him a diſorder abſolutely incurable,

curable, and adding to the doubts of thoſe, who not knowing or conſidering the ſituation in which he arrives at the Wells, attribute that failure of cure to want of efficacy in the waters, which ought to be imputed to the neglect of uſing them ſeaſonably.

For many inſtances have occurred of perſons recovering from pulmonary complaints after drinking the Briſtol water, whoſe cures have appeared to be doubtful from any other proceſs: and though it muſt be allowed that the journey, change of air and ſituation, and variety of objects, circumſtances all of them conducive to health in all lingering diſorders, and in none more than that of which we now treat, as well as the neceſſity of being abroad in a freſh and wholeſome air early in the morning, may contribute conſiderably to the cure; yet we cannot help conceiving, that draughts of light warm water may be of uſe in waſhing away impurities from the ſtomach, allaying the heats of the fever by dilution, and ſupplying the waſte of juices occaſioned by the copious perſpiration which always accompanies this diſorder. To theſe effects we may add thoſe of hope, which will naturally be uſed as an argument to ſolicit the attempt, and will always be promoted by the friends and attendants of the ſick, as an article of great moment towards the cure of a diſeaſe, which generally becomes hopeleſs the moment the patient himſelf becomes apprehenſive of danger. If flattery of any kind can be commendable, it is that which tends to leſſen the fears of the convaleſcent, and inſpire him with expectations of a favourable and happy event.

Bleedings in very ſmall quantities, and frequently repeated, are by ſome conſidered as highly advantageous in conſumptive caſes; and under ſome circumſtances they are undoubtedly ſo, and in particular where the conſtitution apparently abounds with blood; when the blood that is drawn appears extremely ſizy, and where there is much pain in the breaſt, if by this operation theſe ſymptoms are abated, it ſhould be continued; but in delicate conſtitutions, though the pulſe may be quick, and in ſome degree full, and though the blood laſt drawn may be conſiderably ſizy, yet bleedings will probably be attended with no advantage.

Nor is the appearance of the blood alone, though it ſhould be inflamed and ſizy, a reaſon ſufficient for frequent bleedings; other circumſtances ſhould be conſidered, ſuch as the age, ſtrength, habit of body, and uſual evacuations, as alſo the preſent ſtate of the diſeaſe. In the repeated performance of this operation, great caution is certainly neceſſary: with proper care, it may be uſeful; but carried to exceſs, even in ſmall quantities, it may be productive of a variety of ill conſequences.

Where this diſeaſe occaſions ſpitting of blood, bleeding hath been alſo recommended; but we apprehend even in this caſe the ſame precautions are requiſite, and when this circumſtance occurs, the following decoction may be uſed for the patient's common drink.

> Take of the roots of marſh-mallows moderately dried, ſix ounces; or of the leaves, ſtalks, flowers, and roots of the common mallow, two handfuls—raiſins of the ſun, two ounces—water, three quarts. Boil the ingredients till one third of the water is conſumed.

The Peruvian bark hath been conſidered as a very important medicine in theſe caſes; and perhaps where the cauſe of the diſeaſe can be eaſily aſcertained, it may be uſed with ſucceſs: in conſumptions occaſioned by ſuckling children longer than is conſiſtent with the mother's ſtrength, the bark given early, and in moderate quantities, may be of excellent uſe; under ſuch circumſtances it will be always prudent to try this medicine, becauſe it certainly has retrieved many very deplorable ſituations of health.

The bark may alſo be given, when the diſorder is ſuppoſed to ariſe from weakening diſcharges, either from abſceſſes or other extraordinary evacuations; and where the lungs are not inflamed, or but in an inconſiderable degree, it will no doubt be of uſe.

One third of a dram of the powder may be taken in theſe caſes every three or four hours, in jelly, ſyrup, or the patient's ordinary drink: or it may be made into the form of an electuary, by adding conſerve of roſes, and orange or lemon ſyrup, and taken in the ſame proportion.

If the bark in ſubſtance ſhould diſagree, an ounce of the powder may be infuſed twenty-four hours in a pint of water; and after being carefully poured off or ſtrained, taken as often as before directed, in the quantity of a common tea-cupful, or the ſtrength of the infuſion may be doubled, and then joined with a ſaline mixture.

But if, after the bark has been adminiſtered, the breath becomes more oppreſſed and light, the dry cough increaſes, and the pulſe grows more hard and quick, or if ſlight or twitching pains of ſhort continuance about the breaſt are complained of more frequently, the diſeaſe may be augmented by perſevering in the uſe of the bark; and when it produces ſuch effects in the progreſs of conſumptions, from whatever cauſe they ariſe, it will be right to deſiſt from the uſe of it immediately.

If no additional pain, tightneſs, or oppreſſion, is perceivable, but on the contrary, there is an apparent abatement of the ſymptoms, it will be right to proceed: but the adminiſtration of this medicine requires attentive obſervation, that it be neither given in the very inflammatory ſtate of this diſeaſe, nor the uſe of it continued after it produces any of the effects abovementioned. And, upon the whole, as much good or great harm may be occaſioned by this bark, ſo the operations of it cannot be watched with too much attention.

Nor is the elixir of vitriol in certain caſes uſed with leſs impropriety than the bark; a miſtake in quantity having once occaſioned a conſumptive patient to ſwallow an amazing doſe of this medicine; where death was expected to follow, it produced a cure: and to this circumſtance it probably owes the credit in which it has long ſtood in caſes of this ſort.

For when the pulſe is quick and hard, when the difficulty of breathing is conſiderable, and the cough frequent and attended with much heat, and little expectoration, this medicine will often increaſe every ſymptom, and bring on a ſpitting of blood, and all it's melancholy conſequences.

But in the latter ſtages of the diſeaſe, when there is a tendency to putrefaction, it may be cooled and checked by the uſe of the elixir of vitriol, when it alſo reſtrains the waſting ſweats, and may prove even beneficial to the lungs, if they ſhould not be ſo far injured as to be paſt repair.

Some objections have been made to the compoſition of this medicine, in which the mineral acid being combined with ſpices, may, notwithſtanding the anti-putreſcent qualities of theſe aromatics, be too irritating where the putrid tendency proceeds from matter mixed with the blood from broken veſſels; and under this idea, the ſpirit of vitriol in tincture of roſes hath been recommended as a proper ſubſtitute for the elixir.

Balſams have been uſually recommended in the cure of conſumptions; with what propriety, will probably appear from the following conſiderations.

Balſams of every denomination (we would be underſtood to mean thoſe which are known in the ſhops by the names of balſams of Tolu, Peru, Capivi, &c. and the prepared balſams, ſuch as Locatelli's, balſam of ſulphur, &c.) are of a gummous and reſinous nature, and of a hot and acrid quality.

An opinion ſeems to have long and univerſally prevailed, that the external application of theſe gummous, reſinous ſubſtances, promoted the healing of all kinds of wounds and ulcers without exception, and this opinion firſt aroſe from a diſcovery that it was abſolutely neceſſary to defend the parts affected from the air, before any hopes could be entertained of healing them; juices of plants alone were found inſufficient to form a plaſter, unctuous matter ſoon melted, but theſe bodies produced an adheſive and therefore laſting defence. Hence the balſams themſelves, by degrees began to have the reputation of poſſeſſing healing qualities, and virtues of various kinds were attributed to the different ſorts.

Remedies which appeared of efficacy in healing external wounds, were apprehended to poſſeſs ſimilar efficacy towards the cure of internal diſeaſes proceeding from or attended with ulcerations, and of all internal wounds; and it has been, no doubt, from theſe apprehenſions, that ſubſtances ſuppoſed to contain balſamic qualities have been introduced into the preſcriptions for conſumptions, in all degrees and all conditions of the diſtemper.

Balſamics and vulnerary ſubſtances are allowed to warm and ſtimulate the ſolids, and prevent a tendency to putrefaction in the juices.

If in an inflamed ſtate of an ulcer, the patient being young and vigorous, any of theſe reſinous balſams are applied, heat, pain, and an increaſe of inflammation will enſue, and a conſiderable diſcharge will follow; the ſame applications to a cold, phlegmatic habit, in advanced age, would probably only bring on a proper digeſtion, the foundation of a cure.

Hence it will appear, that if we ſuppoſe theſe remedies to produce the ſame effects adminiſtered internally, it can hardly be conceived that medicines ſo pungent and heating can be ſafe, much leſs advantageous, in a diſeaſe which apparently requires very different treatment; nor do they ſeem intitled to the indiſcriminate praiſe which hath ſo laviſhly been beſtowed on them.

Demulcent medicines, or ſuch as ſheath the acrimony of the humours and render them mild, and all ſuch as are of a cooling nature, are to be recommended. Upon the abatement of the inflammatory ſymptoms, gentle anodynes may be uſed; whatever is apt to become rancid, ſuch as expreſſed oils, are irritating; and ſo, in a certain degree, is nitre, and other cooling ſalts: wherever, therefore, they are neceſſary to be adminiſtered, the doſes ſhould be ſmall, and more frequently repeated. An emulſion made with ſweet almonds is an approved vehicle for any remedies which are required to be given; but care ſhould be taken that they are freſh, and unmixed with any bitter ones.

An unexceptionable emulſion may be alſo made with freſh white poppy-ſeed, in the proportion of an ounce of ſeed to a quart of pure water, or rather of Briſtol water, if it can be eaſily procured.

Beat the ſeeds fine in a mortar, adding the water by degrees, ſo that it may mix perfectly, and then ſtrain it off.

Acids in general produce good effects in this diſeaſe; the vegetable acids, or thoſe of fruits, are to be preferred; ripe oranges, or even lemons, may be ſucked with great advantage in conſiderable quantities, as they promote expectoration, perhaps better than the following medicines, which are ſometimes preſcribed for this purpoſe.

Freſh ſquills, powdered cardimum ſeeds, and gum ammoniac, of each half an ounce—beat them together in a mortar, and add of ſimple ſyrup ſufficient to reduce the maſs to a conſiſtency fit for pills; theſe may be made of a reaſonable ſize, and two or three of them taken, once, twice, or thrice a day, as the patient's ſtomach will bear them.

The following mixture hath been alſo recommended to promote expectoration, and to act as a gentle anondyne; which, as we have before obſerved, may in ſome ſtages of this diſeaſe be neceſſary, in particular when the cough is ſo extremely troubleſome as to prevent the patient from taking reſt, and by that means increaſing his ſweats, and adding to his weakneſs.

> Take of lemon juice, two ounces—fine honey, two ounces—ſyrup of poppies, two ounces. Let them heat together, and boil a few minutes over a gentle fire, taking off the froth and droſs which ariſes.

Of this mixture let a large tea-ſpoonful be taken as often as the cough is troubleſome.

But all heating anodynes and cordials muſt be carefully avoided; nor ſhould any others be uſed, or more in quantity, than will ſerve to mitigate a fruitleſs continual cough, nor until the inflammation attending it, is abated by a cooling regimen and proper evacuations.

Conſerve of roſes freely taken, even to the quantity of ſeveral ounces in a day, hath been ſaid to produce very favourable effects, and particularly when there is any diſcharge of blood from the lungs; it may be mixed with the decoction recommended for common drink, or taken by itſelf if more agreeable to the palate.

Drains are alſo eſteemed of uſe in the cure of diſorders of the breaſt; iſſues, ſetons, and bliſters, both temporary and ſuch as are kept open, have been earneſtly inſiſted on, as abſolutely neceſſary; and receiving the vapours or fumes of reſin and wax, and alſo of Sterne's balſamic æther, hath been ſtrongly recommended to relieve the ſhortneſs of breath: and as neither the one or the other can be attended with any ill conſequences, except in caſes where the ſtrength is already too much exhauſted to admit of the drains, we would by no means oppoſe the trying theſe methods of alleviating the pains, and leſſening the dangers of this diſeaſe.

To the cautions neceſſary in producing extraordinary evacuations, another may be added, in a circumſtance which frequently happens in conſumptive caſes, and very often occaſions conſiderable anxiety and ſome difficulties.

Young and delicate females, from the age of fifteen and upwards, are frequently ſubject to conſumptions; in the advanced ſtate of this diſtemper, the periodical diſcharges, if they have ever appeared, generally ceaſe: this alarms their friends; and, at their preſſing inſtances, medicines have been ſometimes adminiſtered, under an idea that this ſtoppage has occaſioned the complaints, which have aggravated the ſymptoms.

But the fact is, that the want of this diſcharge is in theſe caſes attended with no diſadvantage, and the return of it would be injurious, by depriving the patient of a portion of that ſtrength which is already inſufficient for the purpoſes of life; if the ſuppreſſion is ſudden, it may be neceſſary to take a ſmall quantity of blood; but when the evacuation fails through actual loſs of ſtrength, or poorneſs of blood, the diſeaſe will be increaſed by ſuch attempts to promote this diſcharge.

Upon the whole, when we conſider the vaſt variety of cauſes which contribute to this diſeaſe, ſome hereditary, ſome accidental, and many more acquired by irregularity of life, and imprudence of conduct; when we attend to the ſtructure of the lungs, the delicacy of their fabric, the infinite number of veſſels of which they are compoſed, the vaſt importance of the uſes to which they are deſtined, and the multitude of accidents to which they are unavoidably expoſed; we ſhall rather be ſurprized that ſo many perſons eſcape this diſtemper, than that it ſhould prove fatal to a conſiderable number.

Temperance, and a certain degree of caution, in many of the ordinary circumſtances of life, are the chief, perhaps it may be ſaid the only preventives that can poſſibly be applied. But the nature of the diſeaſe may ſo eaſily be known, and the progreſs of it generally ſo happily ſtopped, in the very firſt ſtages, that the remedies then uſed may be in ſome meaſure deemed preventions: as the diſtemper advances, the difficulties and dangers are augmented, and after it has arrived at a certain height, ſcarce a hope remains even of palliation.

Early applications, therefore, are always to be wiſhed; eſpecially as much more may be expected from air, exerciſe, and regimen in diet, uſed in time, than from the higheſt ſkill of the phyſician, and the utmoſt efforts of medicine: in moſt caſes the ſymptoms may be prevented from becoming violent, and in others the diſeaſe may be removed even after it has arrived to a confirmed ſtate; but if it is ſuffered to proceed till it has ravaged the conſtitution, and exhauſted the ſtrength of the patient, little more can be done than to lengthen his exiſtence for perhaps a few months, at the expence of all the pleaſures and moſt of the comforts of life.

CHAP. II.

Of Fevers.

THIS claſs of diſeaſes is ſaid to prove more fatal to mankind, than thoſe of all the other kinds united, and the cure of them is in general attended with great difficulty, becauſe in the moſt ſimple, ſymptoms of very different kinds will appear.

We have already mentioned in the foregoing parts of this work, moſt of the various cauſes of fevers, ſuch as *ſuppreſſed evacuations, bad air, improper food, intemperance, exceſs of paſſions, ſudden changes from heat to cold, or the contrary, and blows or other injuries, external or internal*; for the prevention of theſe cauſes, we have already offered the beſt rules and regulations which occur. There are alſo other cauſes which will appear as we proceed, and preventive methods will alſo be ſuggeſted.

The body is ſaid to be in a fever when the natural heat becomes fiery, or when it is ſo increaſed as to accelerate the circulation of the blood, quicken the pulſe beyond it's natural ſpeed, and diſorder any of the animal functions. A fever hath been deſcribed to be an effort of nature to reſtore health, by ridding the blood of ſome noxious matter tending to create diſeaſe; but it is with much more accuracy and truth conſidered as a ſymptom by which the diſeaſe is increaſed and protracted, and the extinction of the fever will in moſt caſes remove the diſorder by which it was occaſioned.

In conſidering the nature of fevers, we will begin with ſuch as are moſt ſimple, and the cauſes of which are moſt eaſily aſcertained; and ſuch an inveſtigation will ſerve to give a general idea of the diſeaſe, and lead us on gradually to ſuch particular kinds as are more complex both in appearance and effect.

A man in perfect health, both in his ſolids and fluids, engages in ſome violent exerciſe, ſuch as running, tennis, cricket, or the like; this, if continued for a length of time, will greatly increaſe the velocity and heat of the blood, and when the blood is conſiderably above the natural heat, the body is in a feveriſh ſtate: and this is the moſt ſimple *fever*, ariſing ſolely from the increaſed action of the ſolids on the fluids, and the re-action of the latter on the former, which ſubſides ſoon after the ceſſation of the violent exerciſe or motion.

Another, equally healthy, expoſes himſelf to a cold moiſt air, by which his perſpiration may be very conſiderably ſuppreſſed; an increaſed quantity of humours will follow, and the increaſed efforts of nature to throw them off will produce a *feveriſh habit*; which, however, ſoon yields to the kindly relaxing warmth of a bed or diluting liquors, aſſiſting the endeavours of nature towards the reſtoration of the obſtructed evacuation.

A third, of a conſtitution alike vigorous, drinks too freely of wine or other ſtrong or ſpirituous liquors, which not only increaſe the quantity of humours, but alſo ſtimulate the blood, and add to it's motion; and ſo a fever is produced, which abſtinence and ſweating in bed will as eaſily remove.

In each of theſe caſes, only a ſimple fever of ſhort duration is generated; but if, in the firſt caſe, the blood was ſo violently agitated as to force an improper ſeparation of it's different parts, or if the velocity and heat of it is ſo great as to diſſipate too much of the thin part, and leave the remainder groſs, thick, and unfit for circulation in the leſſer veſſels; by the mere ſimple accelerated motion of the blood, an inflammatory fever would be produced, of much longer duration and more dangerous conſequence. If the inflammation ſeizes the lungs, it occaſions that ſpecies of fever which is called a *peripneumony*; if the membrane which lines the breaſt is affected, a *pleuriſy*; if the brain or it's membranes, a *phrenzy*: and theſe diſorders will prove more ſevere, in proportion to the fullneſs or quantity of blood antecedent to the violent motion which occaſioned it.

In the ſecond caſe, the violence of the fever will be proportioned to the extent of the obſtruction of the pores and perſpiration, and to the quantity and thickneſs of the blood.

If, in the third caſe, to much thick and glutinous blood, quantities of wine or other ſtimulating liquors be added, both the quantity of blood, and the quickneſs of circulation may be augmented to ſuch a degree, as to bring on thoſe acute and dangerous fevers which too often follow drunken debauches.

And as any one of the above cauſes may ſingly produce a fever, ſo the concurrence of more than one, or all of them, will occaſion a more violent one: for inſtance, expoſing the body ſuddenly to a very cold air after vehement exerciſe, and ſtopping the ſweat and perſpiration at once, will bring on a very dangerous inflammatory fever; but if the blood had been heated or increaſed by large quantities of ſpirituous liquors drank immediately before, the diſeaſe will of courſe be ſo much the more violent.

The ſymptoms of fevers vary for the moſt part in different patients, and even in the ſame patient at different times; heat and a diſordered pulſe, however, are ſigns which are preſent in every fever, and without which it cannot ſubſiſt; they attend every fever, every degree, and every ſtage of it.

But when the fever approaches gradually, theſe ſymptoms are preceded by languor and a diſinclination to move, ſoreneſs of the fleſh or bones, loſs of appetite, loathing, ſickneſs, and diſpoſition to vomit; heavineſs of the head, and a diſagreeable taſte in the mouth; and as theſe complaints increaſe, they are accompanied with intenſe heat, quick and ſtrong pulſe, reſtleſsneſs, thirſt, &c.

Sudden attacks of a fever are ſometimes denoted by exceſſive coldneſs and ſhiverings, weakneſs, loſs of appetite, oppreſſions and flutterings at the heart, pains in the limbs, ſickneſs, vomitting, and giddineſs.

Various, and almoſt numberleſs, are the diviſions and deſcriptions of *fevers*: by ſome it is ſaid, that they are all contained in thoſe of *ardent*, *nervous*, and *putrid*; others divide this diſeaſe into *continual*, *remitting*, *intermitting*, and *eruptive* fevers; and the former of theſe is again ſubdivided into *acute*, *ſlow*, and *malignant*.

The *continual* fever is deſcribed to be that in which the ſymptoms never leave the patient during the courſe of the diſeaſe, or exhibit no extraordinary increaſe or abatement of violence; this fever is called *acute*, when the peculiar ſymptoms proceed with rapidity and threaten the patient with immediate danger; when the progreſs of theſe ſymptoms is more gradual, the fever is ſaid to be *ſlow*; and when the appearance of ſpots or blotches, of a purple or livid colour, ſhew a putridity in the humours, the diſorder is deſcribed as *malignant* or *putrid*.

The fever is of the *remitting* kind, when the ſymptoms do not always continue in the ſame degree of violence, but when they increaſe and decreaſe at intervals, though they never totally leave the patient in the whole progreſs of the diſtemper.

And thoſe are called *intermitting fevers*, where there are regular intervals of comparative health during the time the patient may be ſaid to continue ill, as in the caſe of agues of different denominations.

Being acquainted with the nature of the diſeaſe, the method of cure will be obvious. Inflammatory fevers require bleeding, to abate the too rapid motion, quantity, and heat of the blood; but thoſe fevers are now (from the concurrence of a variety of circumſtances in the modern manners of life and occupations) become leſs common than nervous, ſlow, or putrid ones, where bleeding is actually prejudicial, and in many caſes extremely dangerous, tending to weaken the patient's body, and ſink his ſpirits: it will always be ſafe not to bleed till ſatisfactory proofs appear that the diſeaſe is of the inflammatory kind, a diſcovery which may be made by an attentive obſerver in the very early ſtages of it.

But the moment it is apparent that the fever is inflammatory, bleeding is not to be neglected; and the quantity of the blood to be taken away, is to be determined by the ſtrength and pulſe of the patient, by the intenſeneſs of the fever, heat, and vehemence of the ſymptoms, as to pain, difficulty of breathing, &c. Nor ſhould even the *bulk* of the patient be diſregarded; for a large, ſtrong man, can certainly afford to loſe more blood than a little man equally ſtrong; however, it is always ſafe to take away rather too little than too much at a time, as the operation may ſo ſpeedily and eaſily be repeated if it appears neceſſary, which may be the caſe if the inflammatory ſymptoms, ſuch as the pain, heat, and oppreſſion of breath, do not abate after the firſt bleeding.

The efforts of nature demand our firſt attention; to promote her attempts is to act conſiſtently with reaſon; nor would this diſeaſe be ſo obſtinate or difficult of cure, if we were more ready to conſult and follow this excellent guide.

When the ſymptoms of a fever firſt appear, keeping moderately warm, drinking plentifully of diluting liquors, bathing the feet in warm water, &c. will in moſt caſes prevent the alarming progreſs of the diſeaſe, and give relief in a very few hours.

The ancients as well as the moderns uſed the cooling methods of relieving from fevers; they alſo expoſed their patients to cold air, gave them cold water to drink, and frequently in ſuch quantities as to promote vomiting; and if contraries cure contraries, this practice is certainly judicious.

Extreme thirſt is always one of the complaints in an inflammatory fever, and the patient earneſtly ſolicits a plentiful ſupply of cooling liquors; in theſe he ſhould be liberally indulged, and not only gruels, of which the ſick are in general ſoon tired, but drinks of fruits, ſuch as water in which apples have been boiled or tamarinds, whey made with oranges or lemons, water mixed with the jelly or rob of currants, raſberries, or cherries, and even palatable lemonade, may be given in conſiderable quantities; and very agreeable and ſalutary draughts may alſo be prepared from the roots of marſh-mallows, the roots, leaves, and flowers of common mallows, linſeed, or other mild vegetables, acidulated and rendered pleaſant to the taſte.

The dry and cruſted tongue, the parched ſkin, and fervent heat, point out the neceſſity of adminiſtering large quantities of theſe diluting liquors; nor can the ſymptoms poſſibly abate whilſt the patient labours under the horrors of intolerable thirſt.

Cooling liquors will alſo contribute to the patient's relief, by promoting gentle ſweats; thoſe, together with the eaſe of lying in bed, will remove that wearineſs and inactivity which are among the ſymptoms of this diſeaſe. It is a common, but pernicious error, to adviſe perſons at the firſt attack of fevers to ſtruggle with them and keep on their legs, an attempt which only ſerves to render the diſorder more violent; the bed alone would in ſome caſes ſtop a beginning fever, the poſture contributing to relax the ſpaſms and leſſen the ardour of the circulation.

But the cuſtom of exciting ſweats in the beginning of fevers, by giving hot and volatile ſudorific medicines, ſhutting out the air, and ſmothering the patient under loads of bed-cloaths, is attended with the moſt deſtructive conſequences, increaſing the motion and heat of the blood already too violent, and adding fuel to the fire; nay, they are often ſo far from producing a ſweat, that they prevent it, by hurrying on the blood too rapidly to throw out the neceſſary and required ſecretion: the higher the fever, the leſs copious will be the excretory evacuations of perſpiration, urine, and ſaliva or ſpittle.

Bliſters alſo, which introduce an acrid ſalt into the blood, and ſtimulate the fibres, are very improper in the beginning, at leaſt of ardent fevers, or thoſe of an inflammatory nature, where the reſtricting power of the veſſels is too great, and the motion of the fluids too rapid. Hot cordial medicines of all kinds are equally pernicious.

Cooling, emolient, and laxative clyſters, are of great uſe in the cure of acute fevers, even at the very beginning, to bring off any hardened excrements which are frequently pent up in the inteſtines, and to give a diſcharge to any ſharp and bilious matter which might otherwiſe, at leaſt partly, be again taken back into the maſs of blood: theſe clyſters alſo ſerve as a warm relaxing fomentation to the lower parts of the belly, relieving the head and ſtomach, and promoting a diſcharge of urine.

Purges of a gentle lenient nature are likewiſe often of the greateſt ſervice, and they ſhould be compoſed either of manna, cream of tartar, common purging or Glauber's ſalts, rhubarb, tamarinds, or the like; violent active purges, and all hot pills of aloes, tinctures, &c. are pernicious; indeed, all profuſe purging is hurtful: when nature ſeems to have a tendency that way, it may be proper firſt to give rhubarb, and then a little of the *ſpecies è ſcordio*, with an anodyne of *poppy ſyrup*.

Freſh air is equally ſalutary and agreeable to a patient in a fever; it relieves the oppreſſion of his breaſt, contributes to cool the blood, and gives him ſpirits: the abominable cuſtom of cloſing up windows and doors, and oppoſing the poſſibility of admitting a breath of air, has no doubt occaſioned great part of the fatality which has uſually attended fevers; inſtead of this infernal practice, let the ſick room be conſtantly ſupplied with ſuch ſtreams of freſh air as will render the degree of warmth agreeable to perſons in health. Nor will the ſteam of vinegar or the fumes of aromatic herbs be inconvenient or prejudicial.

Unneceſſary attendants, and viſiters from curioſity, ſhould be excluded from the chambers of the ſick; numbers of perſons breathing in a room vitiate the air of it, by being repeatedly breathed, it becomes unfit for reſpiration, and acquires noxious qualities, equally hurtful to the ſick, and dangerous to thoſe who are of neceſſity obliged to be about him.

Nor is the injury done to the air the only inconvenience which attends crouding a ſick room with viſitors and unneceſſary gueſts: in all inflammatory diſorders, the head is more or leſs affected, and the imagination diſturbed; the ſpirits are in a flutter, and the mind ſubject to diſcompoſure; in ſuch a ſituation company cannot be even agreeable, and it is certainly extremely prejudicial.

Little caution is neceſſary with reſpect to the food of perſons ſick in fevers; they are ſeldom inclined to eat, nor ſhould they be ſolicited to take any thing ſolid: abſtinence aſſiſts the operations of the diluting liquors; nor will the patient require any other ſuſtenance except now and then a roaſted apple, or a little gruel, barley-water, or panada. Sweet things ſhould be avoided, they tend to increaſe the thirſt, and are apt to lie hard on the ſtomach.

But with reſpect to liquors, every precaution is neceſſary; wine and ſpirits are actual poiſon in all ſuch fevers as are of an inflammatory nature, and will certainly heighten the diſeaſe inſtead of correcting it: even diluting liquors ſhould be taken with care; the ſick ſhould be allowed to drink as freely and as often as they pleaſe, but not forced to load their ſtomachs with large draughts at a time, which create a nauſea, indigeſtion, and wind, with great anxiety and reſtleſſneſs, and in the event produce a vomiting or purging: beſides, of the ſame quantity of liquor, more is likely to be imbibed by the abſorbing veſſels, which are planted thick from the mouth to the ſtomach, by ſipping it down, than if ſwallowed at once in a full draught.

The weakened condition of body, and diſturbed ſtate of mind in fevers, will frequently occaſion longings and deſires after particular kinds of liquids, &c. theſe ſhould always be moderately gratified; what is earneſtly longed after, the ſtomach will eaſily digeſt, and theſe gratifications will contribute greatly to a cure.

Fevers generally enfeeble the patient ſo much, as to endanger frequent relapſes; great care ſhould be taken to prevent him from taking cold, to divert his mind with chearful and enlivening company, to bring him by degrees to endure the air and moderate exerciſe, and not only to conſult his appetite ſo as to ſupply it with light and eaſily digeſted food, but to reſtrain him from taking immoderate quantities at a time, as the ſtomach is commonly voracious after moſt kinds of fevers.

Before we conclude this article, it may be right to mention, that *Clutton's Febrifuge Spirits* have been highly recommended as ſerviceable for fevers in general, of which the following is a compoſition.

> Oil of ſulphur by the bell and rightly prepared, rectified oil of vitriol, and ſpirit of ſalt, of each an equal quantity—and of rectified ſpirits of wine, three times the quantity of the whole. Digeſt them together for a month in moderate heat, then diſtil to dryneſs.

In ardent and inflammatory fevers, as much of this ſpirit as will render pure water of an agreeable acid, may be given in every draught of the patient's common drink; in thoſe of the nervous or putrid kinds, it may be adminiſtered in the ſame proportion, in ſuch cordial or antiputreſcent liquors as are proper in the reſpective caſes.

CHAP. III.

Of Intermitting Fevers, or ſuch as are commonly called Agues.

AN *intermitting fever* quits the patient for a certain time and then returns, and when it is accompanied with cold fits of great violence or long continuance it is particularly called an *ague*.

Intermitting fevers or agues obtain different names, according to the time of the fit's returning. When the fit returns every day, it is called a *quotidian*; when it wholly intermits one day, it is ſaid to be a *tertian*; and when the remiſſion continues two whole days, [illegible] is a *quartan* ague: they are alſo diſtinguiſhed as *vernal* and *autumnal* agues, becauſe they generally appear at thoſe ſeaſons of the year; the former of which commences with the month of February, an[illegible] latter with that of Auguſt.

The common cauſes of agues, are a moiſt, foggy atmoſphere, exhaling from ſtanding or ſtagnate waters, and a ſwampy moraſſy ſoil; or a continuance of cold, rainy, thick, and heavy weather: they may alſo be occaſioned by improper food, particularly ſuch as is of a cold, watery, or windy nature; by a general poverty of diet; by lying upon the damp ground, or in damp houſes, rooms, beds, or ſheets; or from exceſſive fatigue either of body or mind.

Theſe diſorders may in general be prevented by attending to the cautions we have already given under the ſeveral heads of *diet*, *air*, *cleanlineſs*, *evacuations*, *&c.* they are frequently occaſioned by irregularity or inattention; and though the approach of them may in many caſes be avoided, they are difficult to remove, and often attended with ſymptoms of extreme danger.

The uſual ſymptoms are heavineſs, wearineſs, pains in the loins, limbs, and head; yawning, ſtretching, chillneſs in the extremities, and violent ſhiverings and tremblings, particulary of the joints; a ſmall low pulſe, thirſt, reaching, and ſometimes a diſcharge of bilious matter by vomit; and in the hot fit, an intenſe burning of the whole body, redneſs and ſtretching of the ſkin, a ſtrong quick pulſe, watchfulneſs, ſhort breath, delirium, and high-coloured urine without a ſediment: as theſe ſymptoms gradually abate, an univerſal ſweat ſucceeds, and ſoon terminates the fit.

On the day or days of remiſſion, when none of the violent ſymptoms preſent themſelves, the patient feels himſelf indiſpoſed; a chillneſs and diſpoſition to ſhiver accompany a ſlow weak and pulſe; his urine is thick and pale, and either depoſits a ſediment of a red colour reſembling brick-duſt, or contains a ſuſpended cloud; it is alſo often frothy; but ſometimes there is a very thin ſkin or film on the top of it, which ſeems alſo to adhere to the ſides of the glaſs: and this obſervation on the urine; is peculiarly characteriſtic of the ſeveral kinds of agues or intermitting fevers.

In ſome conſtitutions, agues at firſt aſſume the appearance of ardent fevers, and then break into quotidians and tertians; nor is it uncommon for a quotidian or tertian to be forced by a very hot regimen at the beginning, or by violent heating liquors and ſpices adminiſtered as medicines, ſuch as volatile ſpirits, brandy, pepper, and the like, into an inflammatory fever, with phrenzy, pleuriſy, or peripneumony; and, on the other hand, intermitting fevers or agues are very often, eſpecially in the autumnal ſeaſon, diſpoſed to ſink into low irregular remittents, and even into ſlow, nervous, and putrid fevers: and the latter changes are frequently effected by improper evacuations of bleeding or purging, an unwholeſome, groſs, or glutinous diet, or dead ropy drinks, ſuch as water from ſtagnate ponds, foul beer, or the like; and from the ſame cauſes intermitting fevers ſometimes end in jaundice or fatal dropſies.

During the continuance of the ague fit, the patient may drink freely of diluting liquors, or if his ſpirits ſink, white wine whey; but whatever is his drink, it ſhould be acidulated either with juice of orange or lemon, or with Clutton's Febrifuge Spirit already mentioned; and every thing he takes ſhould be warm, in order to bring on the perſpiration.

His diet during the intermiſſions ſhould be of a light and nouriſhing kind, ſuch as broths of white meats, ſago, bread puddings, or the like; animal food ſhould be excluded: his ordinary drink may be weak wine negus, and lemonade, with a ſmall quantity of brandy; and he may alſo take occaſionally, a glaſs of white wine in which orange rind, gentian root, or bitters of the like kind, have been infuſed; and this, perhaps, will be a better adminiſtration of bitters, than the infuſions of camomile, wormwood, or other bitter herbs, which are alſo recommended.

The natural diſinclination to motion, which is one of the ſymptoms of theſe fevers, ſhould by no means be indulged: if the patient's ſtrength will admit of it, he ſhould ride on horſeback during the intervals; at any rate, he ſhould take whatever exerciſe he can go through without being ſubject to great fatigue.

Before we proceed to ſpeak of the medicine which is now ſo univerſally and ſucceſsfully adminiſtered, it may be right to remark, that the treatment of intermitting fevers, in the early ſtages, ought to depend in a great meaſure on the ſymptoms, which will in moſt caſes aſcertain the particular nature and ſpecies of the diſorder.

For inſtance, if the exceſſive heat, violent thirſt, and delirium, give reaſon to apprehend inflammation, bleeding may be proper; but this operation is not ſo genenerally neceſſary, as theſe ſymptoms do not often occur in intermittent caſes.

But the ſtomach and bowels demand our attention, and muſt be cleanſed before a cure can even be attempted; for this purpoſe, purges and vomits may both be neceſſary, though in many caſes vomits alone will be effectual: the ſtomach is commonly burdened in theſe diſorders with cold phlegm, and vomits will often diſcharge a conſiderable quantity of bile, which proves the propriety of this evacuation: from one ſcruple to half a dram of the powder of ipecacuanha will be ſufficient for a grown perſon, and the quantity muſt be leſſened in proportion for younger perſons and children; and as the medicine operates, it may be promoted by tea of camomile flowers, with the addition of a little of the rind of orange.

Antimonial vomits of emetic tartar, from half a grain to a grain in an ounce of water, are alſo ſometimes recommended, and the promotion of a ſweat before the cold fit is expected to approach.

If purges are found neceſſary, they ſhould be of rhubarb, jalap, or Glauber's ſalts, the quantities proportioned to the age and ſtrength of the patient: one ounce of the ſalts, or a ſcruple of the jalap, will be a doſe for a grown perſon, in an ounce of common water or any other ſimple vehicle; if the habit of body be cold and phlegmatic, it may be right to add to the jalap four or ſix drams of ſome aromatic or warm tincture.

After the inflammatory ſymptoms (if ſuch appeared) have been removed or abated, by the ſeveral evacuations which the nature and violence of them pointed out, and which will generally be after three or four returns of the fits or paroxiſms, the Peruvian bark may be ſafely adminiſtered in any way that will be moſt agreeable to the patient; if his ſtomach will bear the powder, no preparation will anſwer the purpoſe better.

One ounce of this bark finely powdered will make twelve doſes, and may be taken in a glaſs of Port wine, or claret, or any other liquid, or reduced to a bolus by the mixture of any ſyrup or jelly of fruit, as may beſt ſuit the patient's palate; theſe doſes are calculated for grown perſons; for youth, children, and perſons of very tender and delicate habits, the quantities muſt be proportionably leſs.

In the quotidian or daily ague, one of theſe doſes ſhould be taken every two hours in the interval of the fit; in the tertian ague, or where there is an intermiſſion of a day, once in three hours will be ſufficient; and in the intervals of the quartan ague, or that which leaves the patient two days together without a fit, it will not be neceſſary to take the medicine oftener than every four hours.

For thoſe who cannot take the bark in ſubſtance, the decoction or infuſion of it may be prepared; the former by boiling two ounces of the bark and half an ounce of ſnake-root, both bruiſed, in two quarts of water until one half is conſumed; this liquor ſhould be ſtrained or poured finely off, and mixed as it is uſed with an equal quantity of claret or port; a common wine-glaſsful of the mixture being a doſe for a grown perſon, to be repeated as we have directed the bark in ſubſtance, and to be proportioned to age and ſtrength in like manner.

Or half an ounce of the fine powder of the bark may be infuſed in a pint of white-wine; the bottle muſt be frequently ſhaken, and after it has ſtood four or five days, the liquor muſt be poured off perfectly fine, and taken in the quantity of a wine glaſs three or four times a day, or more or leſs often, according to the nature of the diſorder, and the frequency of it's return.

And here it may be neceſſary to obſerve, that our readers muſt not underſtand us to mean, that the ſeveral quantities of thoſe medicines which we have directed to be prepared at once, are always ſufficient to effect a cure; or, that if the ſymptoms abate, the repetition of the medicine may be omitted: in ſome inſtances the diſeaſe will yield even to the quantities we have mentioned, but in other caſes much more will be required. Nor is it ſufficient that the uſe of the bark be continued till the fits are ſtopped; it ſhould be repeated till all apprehenſions of a return of the diſorder are at an end, and even then ſhould be left off gradually.

In ſome conſtitutions the bark cannot be ſwallowed in any form; in that caſe it may be injected in clyſters of the following compoſition:

> Two ounces of powdered bark boiled in a pound of common water, till it is reduced to half the quantity; to this liquor, finely ſtrained, add half a dram of diaſcordium.

Let this clyſter (proportioned as to quantity for children) be given very moderately warm, and repeated according to the length of the intermiſſion.

In ſome obſtinate caſes, and in cold and phlegmatic conſtitutions, or for perſons advanced in years, it may be neceſſary to add to the bark ſome warm and aromatic medicines, ſuch as ſnake-root or ginger, or even brandy or other ſpirits; and this may be alſo proper, in damp and rainy ſeaſons towards the cloſe of autumn. But if the fits are violent or very frequent, or the ſymptoms are in any degree inflammatory, every thing of this kind muſt be omitted; and in that caſe, or in thoſe agues which attack in the ſpring of the year, acids or ſalt of tartar may be added inſtead of the aromatics.

Where large quantities of the bark are diſagreeable, the following infuſion of bitters may ſupply the place of ſome part of that medicine, though it will by no means anſwer the purpoſe effectually, unleſs ſome bark is taken at the ſame time.

Take of gentian root, one ounce—dried orange peel and lemon peel, of each half an ounce—coriander ſeeds, half an ounce—cardamums, two drams. Bruiſe the ingredients in a mortar, and pour boiling water on them to the quantity of a quart; of this infuſion a tea-cupful may be taken three or four times a day, with the addition of a ſmall quantity of ſyrup of lemons or oranges, to render it palatable.

Thoſe with whom the infuſion in water diſagrees, may put half the quantity of the ſame ingredients into a bottle of white wine; let them infuſe together forty-eight hours, ſhaking the bottle frequently; after that time it may be left a few hours to ſubſide; and being carefully poured off or ſtrained, a wine glaſs of it may be taken two or three times a day.

After the removal of an intermitting fever by the uſe of the bark, all purgative and laxative medicines muſt be omitted for a conſiderable length of time. Chalybeate waters are particularly recommended after agues.

Where children are afflicted with theſe diſeaſes, the impoſſibility of inducing them to ſwallow ſufficient quantities of the Peruvian bark, will render the cures more difficult; but even to infants it may be adminiſtered in clyſters, adding a ſmall quantity of ſweet oil to the compoſition above preſcribed, and always remembering to proportion the quantity to age and ſtrength; our preſcriptions being calculated for grown and ſtrong perſons, unleſs the contrary is particularly expreſſed.

But even if clyſters of the bark ſhould prove ineffectual with children, a waiſtcoat with the powder of the bark quilted between the folds may be worn next the ſkin; but it ſhould be very frequently changed: bathing them, alſo, in a decoction of the bark, may be ſerviceable, and the ſpine of the back may likewiſe be often rubbed with ſpirits, or with a mixture of equal parts of laudanum, and that ſaponaceous liniment, which is commonly called opodeldoc.

To thoſe who are obliged to ſpend their lives in unhealthy, low, damp, and ſwampy ſituations, and who are of courſe liable to frequent returns of agues and intermitting fevers, it may not be amiſs, more eſpecially at the ſeaſons when they are uſually viſited by theſe diſeaſes, to uſe ſome medicine by way of preventive; and the following ſeems well calculated to meet the approaching diſorder, and may in many caſes actually obviate the attack.

Take of Peruvian bark powdered, half an ounce—of Virginian ſnake-root, two drams—of dried orange and lemon-peel, of each a dram—cardamums, one ſcruple. Bruiſe the latter ingredients, and infuſe the whole in a quart of brandy, Holland gin, or other genuine ſpirits; let it ſtand five or ſix days, frequently ſhaking the bottle, then pour it off fine, and drink a ſmall wine-glaſsful twice in a day. The infuſion ſhould be made in wine for young people, and for ſuch as are wholly unuſed to ſpirituous liquors.

To ſuch as do not object to bitters, the bark chewed, or gentian root taken in the ſame way, will act as preventives; and the uſe of camomile tea, with orange peel, for breakfaſt, may be alſo recommended: bitters of almoſt every kind act as antidotes to intermittent fevers.

But though the unqueſtioned ſucceſs of the bark, in the cure of the different ſpecies of agues, hath rendered the uſe of that excellent medicine almoſt univerſal, yet it may be expected that we mention ſome of the vaſt variety of noſtrums and ſpecifics, which for a length of time prevailed, and are ſtill in daily uſe among female doctors and other notable people in almoſt every part of theſe kingdoms; yet though every one of them is celebrated for having performed a thouſand cures, we do not offer them to our readers as approved or experienced medicines, nor recommend the uſe of them in preference to the Peruvian bark; on the contrary, we adviſe a reliance on that medicine, as the moſt, if not the only, certain means of effectually and radically curing theſe diſeaſes, without vitiating the humours, or deſtroying the conſtitution; but we preſent them as ſanctioned by very common practice, and ſupported by the aſſertions of thoſe who have conceived themſelves to have been relieved by them; though we do ourſelves entertain doubts, whether, when they have ſo far operated as to ſtop the fits, they may not be productive of ſome worſe diſeaſe, either at preſent or in future; an apprehenſion which the heating, violent, and inflammatory compoſitions of ſome of theſe preſcriptions will well juſtify; others are of ſo abſurd and whimſical a nature, that the effect of them can only be on the imagination, which may poſſibly contribute to the expulſion of a diſeaſe, but we are inclined to believe will ſeldom accompliſh it wholly, without the aſſiſtance of proper medicine.

Take grains of paradiſe and long pepper, of each a quarter of an ounce; beat them in a mortar as fine as poſſible, and then add a quarter of an ounce of powdered bark; mix theſe together, and make them into an electuary with a ſmall tea-cupful of common treacle: and dividing the whole into three equal portions, let the patient take one immediately on the firſt approach of the ſhuddering or cold fit; another the inſtant it ſubſides and gives place to the fever; and the remainder the next morning faſting; carefully obſerving to waſh down each portion with half a jill of the beſt French brandy.—Half theſe quantities will be ſufficient for children under five years of age.

White cobweb, rolled into the form of a pill of the ſize of an ordinary pea, taken once, twice, or thrice, according to the length of the intervals between the fits.

Snuff of candle in honey, in quantity as much as will mix to a ſtiff electuary; a tea-ſpoonful to be taken in the evening preceding the expected return of the fit, and to be repeated the evening after the fit has paſſed off.

Slices of lemon thickly ſtrewed with pepper and gunpowder, both finely powdered and in equal quantities, to be bound faſt to the wriſts on the approach of the fit. The patient to lie in bed till the fit is over, and an hour or two after.

Take a handful of groundſel ſhred ſmall; put it in a paper bag *four inches ſquare*, the ſide next the ſkin being pricked full of holes; cover the bag with fine linen, and wear it at the pit of the ſtomach. This remedy is to be applied two hours before the fit is expected, and renewed two hours before the apprehended returns of the ſucceeding fits.

Two ſmall tea-ſpoonfuls of *ſal prunella*, to be taken an hour before the uſual time of the fit's coming on. *This is ſaid to cure, thrice repeated only.*

Eat a ſmall lemon, rind and all.

Apply to each wriſt a plaſter of treacle and ſoot, or a plaſter of turpentine.

Take twenty grains of powdered ſaffron before the fit, in a glaſs of white-wine, repeating till the cure is effected.

Take ſugar-candy, three drams—ginger, two drams—camphire, one dram. Reduce theſe ingredients to a fine powder; mix them, divide into ſix doſes, and take one in warm water previous to the fit.

A volume would hardly contain the vaſt variety of preſcriptions of this ſort which are to be found among the reſpected manuſcripts of moſt families, or which are handed down from mother to daughter, accompanied with traditionary legends of cures annexed to each, and authenticated by teſtimonies which we dare not venture to diſcredit: but we apprehend the ſpecimen already given will be abundantly ſufficient to gratify curioſity, the only uſe we wiſh thoſe we have offered may be applied to, whilſt a remedy ſo ſafe, ſpeedy, and certain, as the Peruvian or Jeſuit's bark, can be ſo readily and reaſonably obtained.

Not but that we apprehend, in caſe of the real want of this invaluable medicine, either of the noſtrums we have inſerted may be tried without great apprehenſion of danger; and if the faith of the patient is ſtrong enough to conceive a cure, it is not impoſſible but ſuch a belief, concurring with the efforts of nature and a vigorous conſtitution, may go a conſiderable way towards the performance of it.

Nor would we be ſuppoſed to hold an opinion, that all ſimple remedies and preſcriptions are inefficacious, and that their being common and eaſily attained renders them of little value; on the contrary, we are convinced, that in many inſtances they are to be preferred to the complicated and elaborate preſcriptions of the diſpenſatory, and it is from this conviction that we earneſtly recommend the bark in all agues and intermitting fevers, as the moſt ſimple, though moſt effectual medicine, that can be met with in the ſhop of the apothecary, or the warehouſe of the leſs regular practitioner.

CHAP. IV.

Of an Ardent or Inflammatory Fever.

THIS fever is alſo denominated *acute* and *continued*, becauſe the ſymptoms are violent; and though they frequently abate and come on again with redoubled ſtrength, yet they never totally remit until the diſeaſe itſelf is in ſome meaſure conquered.

Young perſons, of vigorous and robuſt conſtitutions, active diſpoſitions, and ſanguine habits of body, and whoſe fibres are ſtrong and elaſtic, are moſt liable to this fever; and it commonly prevails in the warmer ſeaſons of the year, though ſometimes in the ſpring.

Any thing which produces an extraordinary degree of heat, or what is commonly called a fulneſs of blood; exceſs in drinking ſtrong liquors, or in eating high and rich food, or too large a quantity; whatever tends to check or obſtruct perſpiration, ſuch as night air, damp linen, rooms or houſes, ſleeping on the earth, or drinking cold and ſmall liquors when the body is heated; will produce this ſpecies of fever.

It may alſo be occaſioned by a continued cold and dry air, impeding the emiſſion of the ſame quantity of perſpiration as in a more moiſt ſtate of the weather; hence the perſpiration is detained in our bodies, and an undue accumulation of it deſtroys that equality of nature which is neceſſary to conſtitute health.

The ſymptoms of the *ardent* or *inflammatory fever*, are, at firſt, chillneſs and violent ſhiverings, a ſtrong quick pulſe, redneſs of the eyes, pains in the head, loins, back, and limbs; a dry and ſtretched ſkin, extreme heat, unquenchable thirſt, white tongue, florid or fluſhed countenance, with anxiety, wearineſs, and reſtleſſneſs.

To theſe ſucceed oppreſſion of the breaſt and difficulty of breathing, nauſea, ſickneſs, and diſpoſition to vomit, and the tongue grows more foul, and becomes of a black or dark brown colour.

At this period of the diſeaſe the more dangerous ſymptoms advance; and delirium, increaſed and moſt painful oppreſſion of the breaſt, ſtartings, twitchings, cold ſweats, and urine paſſing away involuntarily, are ſigns of approaching death.

As the patient's extreme thirſt will occaſion perpetual calls for liquids, he ſhould be ſupplied with gruel of oatmeal, or barley-water, as long as his ſtomach will bear theſe kinds of liquors; but as they are apt to pall and excite ſickneſs, they may have the addition of ſome agreeable acid, ſuch as jellies of fruit, orange-juice, or the like; and ſhould they even with theſe be diſagreeable, apple water, baulm tea, or pure whey made with ſlices of ſour oranges or of lemons, may be ſubſtituted; cream of tartar whey, or vinegar whey, may alſo be uſed; and it is of importance to change the diluting liquors ſo often, as to continue them pleaſing, and induce the patient to ſwallow them in ſmall quantities very frequently.

A light decoction of the roots or leaves of marſh-mallows, or of the common mallow, in three quarts of which may be boiled (eſpecially if the patient is coſtive) two ounces of tamarinds and a quarter of a pound of ſtoned raiſins, will be found a very agreeable liquor, and ſerve alſo as a nouriſhing aliment.

Perſons in fevers have ſeldom much appetite to eat, nor ſhould they be invited to it; however, when any ſuch inclination offers, it may be ſatisfied with roaſted apples, jellies of fruit, ſtewed prunes, and water-gruel or panada; if the patient requires any thing more ſolid, it may be biſcuits without butter, or toaſted bread.

Above all things, keeping the chamber of the ſick well aired, ſprinkled with warm vinegar, and fumigated with the flowers of lavender, is of great importance; in the admiſſion of freſh air, care ſhould be taken that the patient does not get cold; and the moſt effectual caution is, to move the bed out of the current of air, and let him hold a handkerchief to his mouth and noſtrils, whilſt the doors or windows remain open.

Bathing the extremities frequently in warm water, will tend to relieve the headach; and a gargle of baulm-tea ſweetened with honey, and acidulated with black currant jelly, will take off the diſagreeable taſte in the mouth, and prevent the tongue from being loaded.

If the patient is reſtleſs, and not inclined to ſweat, it may be right to change his poſture now and then, either ſetting him up in the bed, or raiſing his head with pillows; but it will by no means be proper to move him if any diſpoſition appears to perſpire.

Nor will perſpiration be promoted by laying on vaſt quantities of bed-cloaths; which, on the contrary, rather retard it, by increaſing the heat and circulation of the blood beyond that degree which is required to throw off the noxious matter: a ſweat is beſt excited by a proper quantity of cooling and diluting liquors, which at the ſame time quench the patient's thirſt, and abate the pains of the breaſt and difficulty of breathing.

We have already ſtrongly enforced the neceſſity of keeping the patient quiet in every ſpecies of fever, and preventing his room from being crouded by unneceſſary company; in no one diſorder is this precaution more requiſite than that of which we now treat: inflammatory fevers are ſo commonly attended with delirium, that too much care cannot be taken to prevent the leaſt diſturbance or hurry of the ſpirits; even the light muſt be excluded if it proves offenſive.

On the firſt appearance of inflammatory ſymptoms, and as early as it is poſſible to aſcertain the nature of the diſorder which threatens, the operation of bleeding is in general abſolutely neceſſary; and unleſs any ſuſpicions ariſe that the full, hard, and quick pulſe, and other concomitant feveriſh appearances, indicate ſome other diſeaſe, or it be forbidden by extreme age, or any other conſtitutional cauſe, this operation ſhould not be delayed: the quantity of blood drawn muſt depend on the ſtrength, habit of body, and other circumſtances. If, after the bleeding, the inflammatory ſymptoms abate, the pulſe becomes ſoft, and the pains in the head and breaſt are leſs troubleſome, it will not be right to repeat it; but if the firſt bleeding does not anſwer theſe purpoſes, but the fever ſhould increaſe, and the pulſe grow more hard and quick, it may be repeated a ſecond and third time, or even oftener, allowing ſuch intervals as the ſituation of the patient or the violence of the ſymptoms demand.

But it may be neceſſary to guard againſt too ſpeedy an application of the lancet, by remarking, that the appearance of the ſlow and putrid fever ſometimes commences with ſymptoms very nearly approaching to thoſe of the inflammatory, and that in caſe of any ſuch tendency bleeding may be prejudicial.

On the other hand, if the other ſymptoms concur in denoting inflammation, an *oppreſſed* pulſe is not always to be conſidered as a ſufficient reaſon for the omiſſion of this operation; in ſuch caſes theſe vibrations frequently become more free and ſtrong after bleeding; and very able and ingenious phyſicians adviſe the operator, if he is in doubt as to the ſafety or propriety of letting blood, to apply his finger to the pulſe in one arm, whilſt the blood flows from the other; and if he finds it flag conſiderably, flutter, or intermit, to ſtop the blood, but if it beats ſtronger or more open, he may proceed with ſafety and ſucceſs.

Perſons who from a laxity of the fibres, and for want of due elaſticity, are apt to faint on bleeding, ſhould always lie down on a bed or ſopha to have this operation performed; in the courſe of which, it will be right to ſtop the orifice frequently for a ſhort time, eſpecially where the load of humours threatens to overbear the powers of the heart, which is commonly the caſe when the pulſe is oppreſſed.

Bleeding being firſt performed, which in full and ſanguine habits is in this diſorder always neceſſary, a vomit may be very proper, eſpecially where nauſea or ſickneſs creates any ſuſpicion of a foul ſtomach; in that caſe, warm water or tea of camomile may prove ſufficient to aſſiſt the efforts of nature; but in ſtrong, vigorous conſtitutions, and where the ſtomach ſeems to be conſiderably loaded, ſome emetic medicine may be neceſſary; in which caſe, either of the following may be adminiſtered, as the circumſtances require.

One ounce of emetic or ipecacuanha wine, taken in the morning; and the vomiting to be promoted by plentiful draughts of camomile tea or barley water.

Or, of tartar emetic, one grain—powder of crab's claws, half a ſcruple. Mix them well to a fine powder, and adminiſter in two table-ſpoonfuls of any ſimple-water.

If this powder excites ſickneſs and an inclination to vomit, let it be promoted as before directed; but it frequently procures a ſtool or two, and occaſions a perſpiration which carries off the diſeaſe; however, it is only proper on the firſt, ſecond, or third day after the ſeizure, or towards the latter end of it, if the patient's ſtrength is not exhauſted.

If the nauſea and ſickneſs do not abate after vomiting, the following ſaline draught may be given.

Common ſimple mint water, one ounce—lemon-juice, half an ounce—ſalt of wormwood, one ſcruple—nutmeg-water and ſimple ſyrup, of each one dram. To be taken every ſix hours.

If a cough ſhould attend this fever, as ſometimes is the caſe, add to this draught half a dram of ſpermaceti mixed with yolk of egg; and if it is neceſſary to promote perſpiration, one ſcruple of powder of contrayerva may alſo be added.

If the patient ſhould be coſtive, clyſters of milk and water, to the quantity of a pint or more, with two drams of the common purging ſalts, and a ſpoonful of ſweet olive oil, may be adminiſtered once a day; common ſalt will anſwer the purpoſe as well as the purging ſalts. A tea-ſpoonful of magneſia or cream of tartar may alſo be given in his common drink till regular ſtools are obtained. The roaſted apples, gellies of fruits, and other acids, which we have recommended for food, will alſo contribute to keep the body open, which ſhould by no means be neglected.

A diarrhœa may be critical, and ſhould be attended to very carefully, but no endeavours ſhould be uſed to ſtop it unleſs it appears to exhauſt the patient's ſtrength: when from the occurrence of that circumſtance it ſeems neceſſary to check it, the following medicines will anſwer that purpoſe.

Take of the powder of ipecacuanha, three grains—of confection, twelve grains. Make into a bolus with ſimple ſyrup, and repeat every two or three hours.

Alſo, take of the common chalk julep, four ounces—of tinctura japonica, or tincture of Japan earth, half an ounce. Of this mixture take two ſpoonfuls after every looſe ſtool.

About the fifth or ſixth day after the attack of this diſorder, there is generally ſome difficulty to keep up the vital heat to that degree which is neceſſary for the recovery of health, or for the due performance of the ſecretion of that matter which is required to be thrown off; and in this caſe, light broths and gentle medicines, tending to promote perſpiration, will be neceſſary.

The inflammatory fever generally draws towards a criſis, from the tenth to the twelfth day. If about this time the pulſe ſoftens, the tongue becomes leſs dry and diſcoloured, and the urine begins to ſhew the brick-coloured ſediment; if the patient's ſtrength ſeems to ſupport him, his ſpirits remain tolerably good and undiſturbed, and his faculties clear; great hopes may be entertained of his recovery.

But if, on the contrary, a languor of ſpirits accompanies a failing or irregular pulſe, with frequent ſtarting and twitches of the tendons; if his breath is drawn with an increaſe of difficulty, and his underſtanding grows confuſed, and is clouded with ſtupefaction, or loſt in delirium; it will be neceſſary to uſe every means that can be deviſed to obviate the fatal conſequences which theſe ſymptoms threaten.

For this purpoſe bliſters may be applied to the head, neck, arms, and thighs, together with ſinapiſms or poultices of the following compoſition.

Take crumb of bread and flour of muſtard, in equal quantities—heat ſtrong vinegar boiling hot, and pour on the ingredients. When the bread is ſufficiently ſoftened, mix all together, and apply on leather or thick linen cloths to the ſoles of the feet.

Scraped horſe-radiſh may be uſed inſtead of muſtard, and garlick bruiſed is ſaid to ſupply the want of both, and to have often produced the happieſt effects.

There are alſo ſome other ſymptoms, which though not uſual, yet ſometimes occur in the courſe of acute fevers, ſuch as bloody urine, and a violent hiccup. For the former of theſe complaints, the following powder.

Powder of gum tragacanth, one ſcruple—nitre five grains—Armenian bole, half a dram; powdered and well mixed together, taken every four hours in three ſpoonfuls of tincture of roſes: to each doſe may be added three drops of the Thebaic tincture, or liquid laudanum.

For the hiccups, the following muſk julep.

Muſk rubbed with white ſugar, half a dram—ſimple cinnamon-water, five ounces. Make a julep, and adminiſter two ſpoonfuls every third hour.

If this ſymptom is vehement, it may be neceſſary to repeat oftener.

But it frequently happens, that theſe fevers run on for a very conſiderable length of time, without either of the laſt mentioned,

tioned, or indeed any other remarkable or very violent ſymptom; in theſe caſes, regimen, air, diluting liquors, and a watchful attention to aſſiſt the efforts of nature, will in general effect the cure; our principal care will be to check the too violent circulation of the blood, and ſo to moderate it's motion as to reſtrain it as much as poſſible within thoſe bounds which nature has preſcribed, and the exceſs of which conſtitutes this diſeaſe.

Nor is a regard to regimen only neceſſary during the continuance of this fever, it muſt be extended long beyond the apparent cure, or there will be a very conſiderable degree of danger, not only of a relapſe, but of diſagreeable conſequences; ſuch as ulcers, boils, and ſettled ſwellings in particular limbs: to obviate theſe, the diet ſhould be light and principally vegetable; moderate quantities only ſhould be taken at each meal; and every ſpecies of exceſs, not only of eating and drinking, but even in exerciſe, amuſements, and mental application, ſhould be avoided. The body and mind both require indulgence after the ſeverity of ſuch a diſeaſe.

The bark may very properly come in to finiſh the cure; a light decoction of the powder in water, or an infuſion in white wine, and the quantity of a wine-glaſs taken once or twice in a day, will effectually allay any remaining heats, aſſiſt digeſtion, and ſtrengthen the ſtomach: ſhould any fever ſtill lurk in the habit, this medicine is, of all others, beſt calculated to expel it.

It is by no means right, though commonly practiſed, to begin a courſe of purging immediately upon recovery from an acute fever; it will be time enough to apply to laxative medicines, when the patient has acquired tolerable ſtrength, and even then they ought to be extremely gentle, ſuch as manna, ſenna, or the like. The following mixture will anſwer this purpoſe, and is perfectly innocent and agreeable.

Half an ounce of tamarinds—half a dram of the leaves of ſenna. Pour boiling water on theſe to the quantity of half a pint; ſtir all well together, then let this mixture ſubſide; pour it off fine, and diſſolve in it half an ounce of the pureſt manna: take a fourth part, and repeat every hour till it operates.

If faintneſs, languor, and great weakneſs, ſhould ſucceed this fever, recourſe muſt be had to change of air, ſaline draughts, and aſſes milk; and ſhould it leave a troubleſome cough, the directions we have given under the article of *conſumptions* ſhould be carefully attended to: when the body is weakened by diſeaſe it is moſt liable to colds; and theſe occaſioning coughs, and inflammations on the lungs, are frequently productive of the laſt-mentioned diſorder; and thus, for want of proper care, the fever is only exchanged for a more lingering, but no leſs fatal malady.

CHAP. V.

Of the Nervous or Slow Fever.

THIS fever differs entirely from the inflammatory, and the following are the uſual cauſes, and moſt remarkable ſymptoms, of this dangerous and deceitful diſorder.

The cauſes are, exceſs of the paſſions, particularly thoſe of anger or grief; violent impreſſions of fear; indolence, or exerciſe beyond the natural ſtrength of the body; too great eagerneſs after, or attention to buſineſs or pleaſure; want of ſleep; irregularity in the general manner of living, and particularly in diet; poor watery food; unripe fruits; a cold and damp, or a cold and moiſt air; ſudden and great changes in the weather; obſtructed or defective perſpiration, exceſſive evacuation, or whatever tends to diminiſh animal ſtrength.

Nervous fevers are ſometimes the effects of other diſorders, or rather of the methods of cure; ſuch as ſalivation, violent purges, and the like.

The ſymptoms of this fever are numerous and various, reſembling almoſt every diſeaſe which affects the human frame, ſo that it is often extremely difficult to diſtinguiſh it accurately; yet the following deſcription comprehends moſt if not all the ſigns which generally occur.

The patient at firſt grows ſomewhat liſtleſs, and feels ſlight chills and ſhudders, with uncertain and ſudden fluſhes of heat, and that kind of wearineſs all over which is felt after great fatigue: this is always attended with a kind of heavineſs and dejection of ſpirits, and more or leſs of a load, pain, or giddineſs of the head; a nauſea and diſreliſh of every thing ſoon follows, without any conſiderable thirſt, but frequently with urging to vomit, though nothing comes up but inſipid phlegm.

Though a kind of lucid interval of ſeveral hours ſometimes intervenes, yet the ſymptoms return with aggravation, eſpecially towards night; the head grows more heavy and giddy, the heats greater, the pulſe quicker, but weak, with an oppreſſion of breathing; a great weight, or obtuſe pain and coldneſs, affects the hinder part of the head frequently, and oftentimes a heavy pain is felt all over the crown of the head; both theſe pains generally attend nervous fevers, and are commonly ſucceeded by ſome degree of delirium.

In this condition the patient often continues for five or ſix days with a heavy, pale, ſunk countenance, ſeeming not very ſick, and yet far from being well; reſtleſs, anxious, and commonly quite void of ſleep, though ſometimes very drowſy and heavy; but although he appears to thoſe about him actually to ſleep, yet he is ſo inſenſible of it himſelf, as to deny his having ſlept at all.

The pulſe during all this time is quick, weak, and unequal; ſometimes fluttering, and ſometimes for a few minutes ſlow, and even intermitting; and then, with a ſudden fluſh in the face, immediately becoming very quick; and, perhaps, ſoon after ſurprizingly calm and equal, and thus alternately. The heats and chills alſo are as uncertain and unequal; ſometimes a ſudden colour and glow in the cheeks, whilſt the top of the noſe and ears is cold, and the forehead at the ſame time in a cold dewy ſweat; nay, it is by no means uncommon for a high colour and heat to appear in the face, when the extremities are quite cold.

The urine is commonly pale, and often limpid as water; frequently of a whey colour, or like dead ſmall-beer; and either dropping no manner of ſediment, or having a kind of looſe matter like bran irregularly floating up and down in it: the tongue at the beginning is ſeldom or ever dry or diſcoloured, but ſometimes covered with a thin whitiſh mucus or matter; towards the cloſe of the diſeaſe, indeed, it often appears very dry, red, and chopped, or of the colour of pomgranate rind; yet, however dry the tongue and lips ſeem, the patient ſcarce ever complains of thirſt, but ſometimes of a heat in the tongue.

About the ſeventh or eighth day, the giddineſs, heavineſs, or pain of the head, become much greater, with a conſtant noiſe in it like the tinkling of a bell in the ear, which is very diſturbing to the ſick, and frequently brings on a delirium; the load on the breaſt and ſtomach, anxiety, and faintneſs, grow much more urgent; and if the patient attempts to ſit up, he ſometimes actually faints away, and loſes all ſenſe and motion: coldiſh ſweats ſuddenly come on in the forehead, and on the backs of the hands, (though at the ſame time the cheeks and the palms have too much heat) and as ſuddenly go off. If the urine now grows more pale or limpid, a delirium is certainly to be expected, with univerſal tremors and involuntary twitchings: the delirium which attends this diſorder is ſeldom violent, but rather a confuſion of thought and action; the unfortunate patients muttering continually to themſelves, and faultering in their ſpeech; ſometimes they appear in a hurry and confuſed on firſt awaking, but recollect themſelves immediately, continue ſenſible and intelligent for a few minutes, and then fall again into the ſame dozing and muttering ſtate as before.

At the height of the diſorder, the tongue often grows very dry, eſpecially in the middle part, with a yellowiſh liſt or ſtreak on each ſide, and when the patient attempts to put it out, it trembles exceedingly: if, at this period of the diſeaſe, the tongue becomes more moiſt, and a copious ſpitting comes on, it is always a good ſign; but a difficulty of ſwallowing, and a continual gulping or choaking in the throat, are very dangerous ſymptoms, eſpecially if attended with any degree of hiccup.

Profuſe ſweats frequently pour forth at once about the ninth, tenth, or twelfth day, the extremities remaining coldiſh and clammy; and thin ſtools are alſo about this time diſcharged, which are generally waſting and weakening: but a general warm moiſture on the ſkin is ſalutary, and a gentle diarrhœa frequently relieves both the delirium and heavineſs.

After this time no favourable ſymptoms appearing, nature ſinks apace; the extremities grow cold, the nails pale or livid; the pulſe may rather be ſaid to tremble and flutter than to beat, the ſtrokes being ſo exceedingly quick and weak as not to be counted, and ſcarce to be diſtinguiſhed, though ſometimes they creep on ſurprizingly ſlow, and at others intermit; the ſick becomes in a manner inſenſible and ſtupid, and is ſcarce affected by the loudeſt noiſe or the moſt piercing light, though at the beginning of the diſeaſe the impreſſions of either were troubleſome and offenſive: the delirium now ends in profound ſleep, from which the patient never awakes; or the ſtools, urine, and tears, running off involuntarily, foretel ſpeedy diſſolution, and the vaſt tremblings and twitchings of the nerves and tendons, are preludes to a general convulſion, which at once breaks ſhort the thread of life. In one or other of theſe ways the patient generally dies, after having endured the complicated horrors of this diſeaſe for a fortnight, or in ſome inſtances three, and even four weeks.

All perſons afflicted with this diſorder grow deaf, and in a certain degree inſenſible, towards the cloſe of it, though one of the beginning ſymptoms is too great ſenſibility of noiſe and even of light; extreme apprehenſion of danger ſeems alſo to be a conſtant attendant on this fever, which is frequently brought on by this very means. Inſtances are not unfrequent of perſons ſuffering ſuch terrors from the poſſibility of going off in a ſleeping fit, or of the perturbation of ſpirits in which thoſe who are ſick in this diſeaſe generally awake, that they have actually endeavoured to avoid ſleeeping at all.

It ſometimes happens that the deafneſs terminates in impoſthumes of the ears; this is a favourable ſign: if abſceſſes form behind or below the ear and come to matter, theſe, and eruptions about the noſe and mouth, are alſo ſymptoms of recovery.

The appearance of this diſeaſe hath been ſo frequent of late years, and the neceſſity for a very minute deſcription of the cauſes, ſymptoms, and various appearances, becoming daily more apparent, we are perſuaded our readers will not be diſpleaſed to find, that we have not only fully and attentively conſidered this diſeaſe ourſelves, but have alſo conſulted the various eminent and ingenious writers, on a ſubject which hath been more lightly and looſely treated in ſome modern publications, than we apprehend a matter of ſuch high and too general importance deſerves. Nor do we, with the writers of theſe publications, conceive, that little more is neceſſary to the cure of nervous fevers, than large and frequent draughts of wine: we have known many perſons unhappily reduced to theſe diſorders by an over free uſe of that palatable cordial; but we confeſs we never met with any caſe where that alone hath effected a cure.

Yet do we not adviſe the ſame, or a ſimilar regimen, to that which is ſuitable to acute or ardent fevers; in thoſe of the nervous kind, diluting liquors are alſo neceſſary, though not in ſuch quantities as in inflammatory caſes, but ſufficient to ſupport ſome degree of perſpiration, and to ſupply freſh fluids inſtead of thoſe which are by this means carried off: to theſe liquors may be added a moderate proportion of wine, which, as well as lemon and orange juice, may alſo be uſed in ſuch ſpoon meats as conſtitute the patient's food, and which may be panada, hartſhorn-jelly, ſago, or the like. Towards the going off of the fever, thin chicken broth will be uſeful, being both diluting and nouriſhing.

Nor do we altogether approve of the cool regimen with reſpect to air, liquors, &c. for reaſons which will appear in our directions for the medical treatment of this diſeaſe.

The repetition of injunctions to keep the patient's mind eaſy and quiet, to flatter him with hopes of recovery, and to prevent him from being haunted with *gloomy or frightful* ideas, we hold to be unneceſſary. There is not a diſorder in the whole catalogue of maladies to which the ſame advice does not apply; nor can we conceive any ſet of beings, attendant on the ſick, ſo ſtupid or inhuman as not to have ſuggeſtions of the ſame kind preſent themſelves, without their being regularly inculcated in treating of each particular diſeaſe.

In this fever conſiderable evacuations are to be avoided, and in particular bleeding; and this caution is more neceſſary in perſons of lax and weakly conſtitutions. Purges, eſpecially ſtrong and active ones, are generally pernicious; yet it may ſometimes be neceſſary to clear the firſt paſſages by a little manna or rhubarb, and by a gentle emetic of ipecacuanha, in caſe of nauſea, ſickneſs, or load at the ſtomach, which frequently occur at the commencement of this fever. If the patient is of a coſtive habit, or nature wants relief by ſtools, clyſters of the common compoſition, milk, coarſe ſugar, and ſalt, may be adminiſtered every other day, or every third day at fartheſt.

In the early ſtages of this diſeaſe, remedies of the milder kind, to promote perſpiration, and ſuch as are in ſome meaſure cordial, ſeem moſt applicable: among theſe, the following draught may be recommended.

Common water, one ounce and a half—ſpermaceti, one ſcruple—powder of contrayerva, one ſcruple—ſyrup of ſaffron, one dram. To be taken once in ſix hours.

In caſe the contrayerva ſhould heat, or promote too great a degree of ſweating, it may be exchanged for the ſame quantity of compound powder of crabs claws.

Though profuſe ſweats are not to be encouraged, yet gentle perſpirations are attended with agreeable conſequences; they relieve the patient from heats, quiet the anxiety and flutter, and keep him more eaſy than in any other ſtate.

If violent ſweats ſhould have been imprudently excited by the uſe of volatile ſpirits, or other hot medicines, they frequently occaſion that drooping of the ſpirits, and thoſe ſtartings and twitchings we have before deſcribed, which ſometimes end in ſpaſms, cold or clammy ſweats and faintings, or heavineſs to ſleep; and ſometimes heats and fluſhes ſucceed, partially and irregularly, and accompanied with reſtleſſneſs, anxiety of mind, loſs of reaſon, difficulty of breathing, and great oppreſſion on the breaſt and ſtomach; yet, though the laſt-mentioned ſymptoms ſeem to indicate inflammation of the lungs, bleeding is by no means to be attempted: the urine and the ſtate of the pulſe, which even, with the complaints laſt mentioned, will be weak, unequal, and fluttering, though probably quick, are ſufficient to deter us from this operation. The difficulty of breathing really ariſes from ſome ſpaſm on the vital parts, and is not in this caſe to be attributed to inflammation.

But in this ſtate of the diſeaſe, bliſters ſhould be applied to the arms, thighs, or legs, and the following bolus and draught may be adminiſtered every fifth, ſixth, ſeventh, or eighth hour, according to the urgency of the ſymptoms.

Take of powder of contrayerva, twelve grains—of Engliſh ſaffron, three grains—of Raleigh's confection, one ſcruple. Make into a bolus with ſyrup of ſaffron.

Common purging ſalts, half a ſcruple—lemon juice, four drams—common mint-water, one ounce and half. After the effervescence or boiling occaſioned by this mixture is paſt, add of ſpirit of lavender, one dram and a half—and the like quantity of ſyrup of ſaffron; and make a draught.

When the tremors or twitches are violent, muſk, to the quantity of ſix or eight grains, may be ſubſtituted for the contrayerva powder.

The volatile aromatic ſpirit, or the fœtid volatile ſpirit, to the quantity of two or three drams, may be occaſionally adminiſtered in whey made from wine, cyder, or muſtard; the latter, which is generally within the reach of even the poor, is a medicine which may be found extremely ſerviceable.

Or a cordial julep may be prepared as follows.

Take of ſimple cinnamon-water, two ounces—of nutmeg-water, two ounces—of volatile aromatic ſpirit, one dram—of the volatile fœtid ſpirit, one dram—ſyrup of orange-peel, half an ounce.

Of this julep two or three ſpoonfuls may be given whenever the patient's ſpirits ſink, or he appears to labour under particular anxiety.

About the ſeventh, ninth, or eleventh days of this fever, an eruption of a miliary appearance frequently ſhews itſelf; a ſymptom which will be foretold by the difficulty of breathing, and oppreſſion on the breaſt and ſtomach; and great care ſhould be taken not to check the efforts of nature in this particular ſymptom, which is ſometimes critical; on the contrary, the eruption ſhould be encouraged, by diluting liquors and ſoft and mild cordials, to which may be added in ſome caſes a ſmall quantity of *theriaca Andromachi*, or *elixir aſthmaticum*;

ſuch mild opiates contributing to calm and allay the perturbation of ſpirits, which is uſually a complaint in this diſeaſe, and alſo to promote thoſe breathing ſweats, with which the eruption will advance in a more eaſy and kindly manner.

But as we have already obſerved, profuſe ſweats are ſeldom or ever of advantage in the earlier period of this diſorder, ſo neither are they more ſo in this advanced ſtate of it, even though they ſhould occaſion a very large appearance of eruption; for when theſe puſtules are accompanied with great ſweats, ſeveral crops of them will frequently ſucceed each other, and inſtead of affording the patient relief, reduce him to extreme weakneſs.

In ſuch waſting and profuſe ſweats, a little old and unadulterated Port wine or claret, diluted or not, as circumſtances direct, may be uſed to great advantage; but *the quantity of a bottle or two in a day* we can by no means recommend: however ſuch a courſe *may* have been attended with ſucceſs, it is an experiment of which we cannot adviſe a trial.

As the fever declines, and the ſymptoms are become leſs violent, if the ſweats continue ſo abundant as to be conſiderably weakening, the bark may be adminiſtered; and will in ſome inſtances render the intermiſſions, which frequently take place as the diſeaſe goes off, more diſtinct and obſervable, and will alſo conſiderably ſhorten the duration of theſe fevers, and prevent the danger of relapſes, which are frequently more difficult to overcome than the firſt attacks.

The bark may be given in the following form; ſmall doſes of rhubarb, or manna diſſolved in the infuſion of ſenna, being firſt directed, and more eſpecially if the patient ſhould be coſtive.

Take of Peruvian bark powdered, two ounces—of the rind of Seville oranges, two ounces—Virginian ſnake-root, three drams—Engliſh ſaffron, four ſcruples—cochineal, two ſcruples—French brandy, twenty-four ounces. Infuſe the ingredients in a veſſel cloſely ſtopped three or four days, and then ſtrain or pour off fine.

Of this infuſion give from one dram to half an ounce, according to age, ſtrength, and other circumſtances, every fourth, ſixth, or eighth hour, in a glaſs of wine, or wine and water; adding to every doſe from ten to twenty drops of the vitriolic elixir.

A gentle diarrhœa, or moderate purging, in the declenſion of this fever, may be conſidered as a favourable circumſtance; but when the ſtools are crude, thin, and acrid, or of a livid colour, or like that of lead, they are ſo far from being beneficial, that they weaken and ſink the patient exceedingly: when this diſcharge is violent, and attended with the appearances juſt mentioned, it may be reſtrained by a mild and cordial opiate, ſuch as the *theriaca Andromachi*, which quiets the irritation, and promoting perſpiration, moderates the purging; but all violent aſtringents ſhould be avoided, as they tend equally to ſtop the flux too ſuddenly, and to check the efforts of nature in the diſcharges through the pores.

Among the evacuations which may be conſidered as leading to health, there is none of a more favourable kind than that of a ſalivation, or copious ſpitting, provided it is unaccompanied with thoſe eruptions in the mouth and throat, which have the appearance of the thruſh; but if this ſhould happen, it will be neceſſary to waſh the mouth and throat freely and frequently with the following gargle.

Barley water, two ounces—honey of roſes, half an ounce—tincture of myrrh, two drams.

But if theſe ingredients are not at hand, ſyrup of black currants with warm water may be very ſucceſsfully uſed.

Towards the decline of this diſeaſe, it is uſual to dry up the bliſters, as no longer neceſſary: but this is by no means adviſeable; on the contrary, ſuch diſcharge is at this ſtage of particular uſe, and the more conſiderable it is, the better in general. Ulcerations about the bliſtered parts have been thought favourable ſymptoms; and where theſe do not happen, the drains ſhould be kept open for ſome time, or freſh bliſters applied to other parts of the body.

When the ſymptoms have entirely diſappeared, leaving no reaſon to apprehend a relapſe, proper attention to a change of diet will be neceſſary: and if to light and nouriſhing food, ſuch as milk chocolate, jellies, ſago, or ſalop, for breakfaſt and ſupper, and dinners of mutton or beef-tea, with biſcuit, and boiled chicken, or fiſh of the moſt delicate kinds; be added change of air, gentle exerciſe, and the uſe of aſſes milk—the recovery of ſtrength will be more ſpeedy than even after acute fevers.

But ſome inſtances occur, where from the continuance of the deafneſs, for a very conſiderable time after the cure of the diſorder, the faculties will appear to be impaired, but will be evidently reſtored, upon the removal of that impediment to apprehenſion: more melancholy caſes ſometimes but not very frequently happen; where, under theſe circumſtances, reaſon actually receives irreparable injury, and though the unfortunate patient eſcapes the fatality of the diſeaſe, his recovery may be deemed a misfortune, as he degenerates into a ſtate of idiotcy, from whence he is rarely or ever brought back to any degree of ſenſe.

Upon the whole it will appear, that in all ſlow and nervous fevers, whether of the miliary kind (that is to ſay, accompanied with eruptions) or not, the great end of medicine ſhould be, to aſſiſt the operations and efforts of nature, and to join in ſupporting the patient to undergo them; and that, too, in ſuch a manner, as may perfectly agree with the general laws of animal œconomy; lending the aid of art to procurediſcharges where thoſe of nature are deficient, and exerting the ſame powers to repel or reſtrain evacuations, where their profuſeneſs or inordinacy threatens waſting or weakening that ſtrength which is ſo abſolutely neceſſary to carry the patient through this tedious diſeaſe: but in which ever way the aſſiſtance of art is required, great care ſhould be taken never to pervert or counteract any ſymptom tending to a particular criſis, which obſervation and experience have found ſalutary and regular; but, on the contrary, ſo to direct our endeavours, as to favour the approach of ſuch ſymptoms, and the perfecting them to the deſired criſis.

CHAP. VI.

Of the Putrid, Malignant, Spotted, or Peſtilential Fever.

THESE fevers, though differently deſcribed, include alſo *gaol* and *camp fevers*; and, in general, all ſuch as are generated by putridity of the air or blood.

Such perſons are moſt ſubject to theſe diſeaſes as are of weakly habits and conſtitutions; thoſe who labour hardly, and live poorly; thoſe who live luxuriouſly, and uſe little exerciſe; and ſuch as have loſt the vigour of their conſtitutions by violent operations of medicine in the cure of obſtinate diſorders; perſons who, from the neceſſities of buſineſs, or a diſſipated ardour after amuſements, are over-watched; and thoſe whoſe habits are conſtitutionally cold, phlegmatic, or irritable: thoſe alſo are moſt liable to theſe fevers, who indulge the paſſion of grief immoderately, or fix their thoughts too intenſely on particular objects or purſuits.

Hence it will appear, that theſe diſeaſes may be cauſed by improper food; and of that, ſuch animal fleſh as is in a ſtate of rottenneſs before it is eaten; corn which has been damaged by being laid up before it was properly dried, or which has received accidental moiſture afterwards; and dead, vapid liquors, drank in conſiderable quantities.

The weather and diſpoſition of the air alſo frequently occaſion theſe diſeaſes; a moiſt atmoſphere, with conſiderable heat, and a ſouth wind of long continuance, with a cloſe and ſultry ſky, are commonly productive of putrid diſorders.

In gaols, camps, and other crouded or confined buildings, theſe diſorders often originate in filth and naſtineſs; and in all cloſe apartments, the air, by being frequently breathed, becomes highly putrid, and begets diſeaſes of the like kind.

But the more common cauſe of theſe fevers is infection, by which the contagious matter is received into the lungs by inſpiration, or drawing the breath, or carried into the ſtomach with the food we ſwallow; theſe diſeaſes are alſo ſometimes produced by the abſorption of matter from any ulcers, wounds, or ſores, which becoming putrid, a portion of that matter is taken into the blood, and corrupts the whole maſs.

The ſymptoms, as excited by different manners of receiving infection, have been nicely diſtinguiſhed: if it is received from the atmoſphere by the lungs, the ſymptoms which firſt appear are ſaid to be of the nervous kind; if the ſtomach is firſt affected by ſwallowing the contagious effluvia with the food, ſickneſs, vomiting, and reſtleſſneſs, are the firſt conſequences; and if the blood takes in diſeaſed matter by abſorption—heat, delirium, high-coloured urine, diarrhœa, and other ſymptoms of the like kind, follow.

The ordinary ſymptoms of this claſs of fevers, are ſhiverings or rather ſhudderings, more violent than thoſe with which the ſlow nervous fevers attack; heats much ſharper and more permanent, though at firſt ſudden, tranſient, and differing in degrees at different times.

The pulſe more ſtrong and hard, but commonly quick and ſmall, ſometimes ſlow and ſeemingly regular for a time, and then becoming unequal and fluttering; violent head-ach, or more commonly giddineſs; an oppreſſion of the ſpirits, and diſinclination to all motion; a nauſea and diſpoſition to vomit; a ſevere fixed pain is ſometimes felt in one, and at other times in both temples, or over one or both eyebrows, and frequently in the bottom of the orbit or ſocket of the eye; the eyes themſelves always appear full, heavy, yellowiſh, and often rather inflamed; the countenance ſeems bloated, and more deadcoloured than uſual; the temporal arteries throb much, and a ringing in the ears is extremely troubleſome; a ſtrong vibration of thoſe arteries which paſs before the ears frequently takes place, though the pulſe at the wriſts may at the ſame time be ſmall and ſlow. When this ſymptom occurs, it denotes approaching delirium, proceeding generally from ſome conſiderable obſtructions in the brain.

The dejection of ſpirits, languor, and weakneſs, often come on in a manner ſurprizingly ſudden, and that too without any violent or extraordinary evacuation, and even ſometimes when the pulſe is tolerably ſtrong. The breathing is alſo commonly attended with great difficulty, which occaſions a kind of involuntary ſighing or ſobbing, and the breath is fiery and offenſive.

Theſe fevers are ſeldom unaccompanied with pains in the loins and back; an univerſal ſoreneſs, and a wearineſs which ſeems as if it proceeded from ſome violent exerciſe; pains in the limbs, are ſometimes felt with ſeverity; and the pit of the ſtomach is affected with pain and a great heat and load, which is attended with perpetual vomiting of black choler and a very diſagreeable hiccup, and the matter thrown up is frequently very offenſive to the ſmell.

The tongue, which is generally white at the beginning, grows more dark and dry as the diſeaſe proceeds; ſometimes becomes of a livid colour, with a kind of dark bubble at the top, and at other times grows exceeding black, and not only continues ſo for many days in the progreſs of the diſeaſe, but in appearance wears off ſlowly even after a favourable criſis: at the height of the diſorder it is not only black, but becomes dry and rigid, or ſometimes changes to the colour of pomegranate rind; and this condition of the tongue occaſions the ſpeech to be ſo inarticulate, as to be ſcarcely intelligible.

Thirſt is a very uncertain ſymptom; at ſome times it is ſo great as to be actually unquenchable, yet every drink that is offered is diſagreeable to the palate, the ſtate of the tongue communicating the ſame taſte to every liquid; in other inſtances, though the whole mouth and tongue are parched, dry, and furred, yet no thirſt is complained of, and this is a ſymptom of danger threatening phrenzy or lethargy. The lips, and even the teeth, partake of the foulneſs of the mouth and tongue.

The urine, at the firſt attack of this fever, is frequently crude, pale, and fouliſh, but grows higher coloured as the diſeaſe advances, and aſſumes the appearance of a very ſtrong lye, or of being tinged with a very ſmall quantity of blood; it is then without the ſmalleſt ſediment or cloud, and this aſpect continues for many days together; by degrees it becomes darker, appears like dead ſtrong-beer of a very high colour, and the ſmell of it is extremely rank and offenſive: in ſpotted fevers it is almoſt black, and intolerably ſtinking.

Towards the height, or in the decline of the diſtemper, the ſtools are for the moſt part inſufferably offenſive, livid, black, or green, and diſcharged with ſevere griping, and even blood; the more they incline to yellow or brown, the leſs is the danger; but whenever they paſs involuntarily, of whatever colour, it is extreme: after profuſe evacuations of this ſort the belly will in ſome inſtances appear ſwelled, diſtended, and hard; this is alſo a very unpromiſing ſymptom, too often denoting that the inteſtines are inflamed and tend to mortification. Nature ſometimes prompts a gentle diarrhœa to carry off the diſeaſed matter, and this proves highly beneficial.

But the malignity of this diſeaſe is in no ſymptom ſo diſcoverable as in the appearance of black, livid, dun-coloured, or greeniſh ſpots; when the black or violet-coloured blotches become of a brighter colour, or appear florid, the leſs danger may be apprehended. The larger black or livid ſpots are almoſt conſtantly attended with profuſe diſcharges of blood, which burſt from the noſe, eyes, mouth, and ears; nor are the ſmall, duſky, brown ſpots, reſembling freckles, leſs dangerous, though they are not often accompanied with the fluxes of blood. The time when theſe ſpots appear, is extremely uncertain; ſometimes they begin to ſhew themſelves on the fourth or fifth day, and in other inſtances not till even after the eleventh: the large livid, or dark greeniſh blotches or marks, ſeldom approach till a very fatal period draws near. An efflorеſcence or partial eruption, like the meaſles, is not uncommon in malignant fevers, but of a more faint and dull hue, variegating and marbling the ſkin, particularly on the breaſt: this is alſo an ill omen, and is generally attended with the worſt conſequences.

Profuſe ſweats ſometimes come on from the eleventh to the fourteenth day, and the ſpots diſappearing, vaſt numbers of ſmall, white, milliary puſtules come out; but this change ſeldom produces any thing favourable. If, on the going off of the ſpots, a raſh of a lively red colour ſucceeds, accompanied with itching and ſmarting, it commonly proves a very conſiderable relief; as well as large, watery, fretting bladders, which ſometimes riſe on the back, breaſt, and ſhoulders: ſcabby eruptions alſo about the mouth and noſe are among the ſalutary ſymptoms, and the more fiery and inflamed they are the better; but a thruſh, or pimples on the mouth and throat, whether of a dark brown colour, or thoſe which, being white like lard and thick, wear a more promiſing aſpect, are of a very uncertain and dangerous nature, and are in general ſpeedily ſucceeded by inability to ſwallow without extreme difficulty, ulceration of the paſſages into the throat, and of the gullet itſelf; and by an inceſſant and violently convulſive hiccup, all the firſt paſſages become at laſt affected, a bloody dyſentery comes on, and is followed by a mortification of the inteſtines, which is evident from ſtools black, bloody, horribly offenſive, and extremely infectious.

Blotches or marks of a bluiſh colour, and reſembling thoſe which are occaſioned by violent bruiſes, are frequently ſeen in the latter ſtages of theſe diſeaſes; and when the extremities are at the ſame time cold, and change to a livid colour, are certain tokens that the cloſing ſcene approaches.

Other unfavourable ſymptoms, are a change of voice; the eyes wild, ſtaring, and ſeeming almoſt ready to ſtart from the head; and a conſtant inclination to throw off the bed-cloaths, and uncover the breaſt: when theſe occur, little hope can be entertained of the patient's recovery. Deafneſs, at the decline of the diſeaſe, is generally eſteemed a flattering ſymptom.

Theſe fevers are often inflammatory in their beginning, but they very ſhortly become putrid, and in ſome caſes diſorders of a very different nature terminate in putridity by long continuance.

The great objects which ought to engage our attention in the cure of theſe diſeaſes are, to ſtop the progreſs of the putrefaction, and to reſtore the vital heat, which muſt have been leſſened in a conſiderable degree before the blood could be reduced to a ſtate of putridity.

Putrid air being one of the cauſes of theſe fevers, it will be neceſſary to change that of the patient's room very frequently, not only by admitting freſh air through the windows, but by opening oppoſite doors or windows, in ſuch a way as to give a current for the expulſion of that which is foul and vitiated. The linen of the ſick ſhould be very frequently changed, care being taken that the clean is very thoroughly aired and dried by the fire; the ſtools, and even the urine, ſhould be buried in places dug in the ground for the purpoſe, and by no means thrown into the common privy or neceſſary-houſe, the exhalations from whence might infect the air, and render it peſtilential: acid vapours and ſteams of hot vinegar ſhould be conveyed into the ſick room, which ſhould alſo be ſprinkled frequently with various acids; ſlices of the acid and highly-ſcented fruits, ſuch as oranges, lemons, &c. ſhould be ſcattered about the room; and the patient ſhould have one of thoſe fruits conſtantly at hand to ſmell to: the ſick room may alſo be fumigated with myrrh and other antiputreſcent drugs.

Even the diet ſhould be acidulated; the ſago, jellies, or gruel ſhould be rendered both palatable and medicinal, by mixtures of Port wine, old hock, or Rheniſh, with the juice of lemons or oranges; wine whey and muſtard whey, are alſo very proper drinks; and beef broth, or rather tea, made by boiling very lean meat only a few minutes, may conſtitute a part of the patient's food.

Diluting liquors, though rendered ſomewhat more cordial than in acute fevers, are extremely uſeful in theſe of which we now ſpeak; but the ſame caution as to taking ſmall quantities at a time, both of theſe and of food, is more neceſſary in theſe diſeaſes than in the others. Clutton's Febrifuge Spirit, or the elixir of vitriol, may alſo be uſed to acidulate theſe liquors by way of change.

Ripe fruits, whether preſerved or not, may be eaten without reſerve; in particular, raſberries, ſtrawberries, and currants; roaſted or boiled apples, or the ſoft parts of either in wine and water, or water alone.

Bleeding is never to be attempted without the utmoſt caution, and only in the beginning of the diſeaſe; and when a quick ſtong pulſe, ſharp heat, great difficulty of breathing, and violent pains of the back and head demand it: but it ſhould be obſerved, that even in caſe of theſe ſymptoms, and although ſhiverings and chillneſs precede the heat, and the oppreſſion on the breaſt be very conſiderable, yet a much ſmaller quantity of blood ſhould be drawn than in an inflammation of the lungs attended with nearly the ſame ſymptoms. Nor will the one diſeaſe be eaſily miſtaken for the other, if due regard be had to the deſcription we have given of the ſymptoms attending putrid fevers; and there will be ſtill leſs danger of this miſconception, if the peſtilential or ſpotted fever be common, or the conſtitution of the air diſpoſed to generate theſe diſorders: and the firſt blood taken away will generally put the matter paſt doubt; that of the putrid patient being of a more looſe contexture, and ſofter conſiſtence than that which is taken from the ſick either in pleuriſies or inflammations of the lungs; if, on the contrary, the blood becomes ſolid and firm after ſtanding, the operation is by no means to be repeated, nor ſhould it take place at all where the diſeaſe is apprehended to proceed from contagion, even though the ſymptoms may run high at firſt.

But as the attack of almoſt every infectious fever occaſions a ſickneſs at the ſtomach, and an inclination to vomit; and as the noxious effluvia are ſwallowed with the ſpittle; gentle emetics may be extremely proper, not only to waſh away theſe particles of contagion, but to carry off any bilious, acrid, and putrid matter, that may lie upon the ſtomach, and which by continuing there would grow more and more corrupt, produce various bad ſymptoms, and ſerve to augment the original diſeaſe. For this purpoſe, decoction of ipecacuanha, or from one to two grains of emetic tartar, may be given, and worked off with tea of camomile-flowers; the enormous quantity of which uſually ſwallowed, is ſo far from being neceſſary, that it ſometimes over-loads the ſtomach to ſuch a degree, that it has not force to reject the load laid on it; ſo that the more liquid is poured in, the leſs capable it is of performing it's office, and being too much diſtended, it may become inactive, and dreadful conſequences follow. In all caſes, therefore, if the vomiting does not follow drinking a pint or two, endeavour to forward the diſcharge with your finger or a feather, avoiding that deluge of drink which is too often moſt prepoſterouſly given.

If the vomiting continues after the ſtomach has been thus waſhed out, a common ſaline mixture, with a ſmall quantity of theriaca Andromachi, from one ſcruple to thirty grains, may be given; which, with a plaſter or cataplaſm of ſpecies aromaticæ and theriaca, applied to the ſtomach, will in many caſes prove effectual.

But though no ſuch nauſea, ſickneſs, or diſpoſition to vomit, ſhould indicate the neceſſity of waſhing out the ſtomach, yet the emetic tartar in ſmall quantities may be given, and repeated every third or fourth hour, till it produces vomit or ſtool, or promotes gentle perſpiration.

After the uſe of this medicine and it's operation, the following draught may be adminiſtered every ſix hours.

Of camphorated julep, one ounce—of tincture of ſnake-root, one dram—of ſyrup of ſaffron, one dram.

Or the following:

Of theriaca Andromachi, thirty grains—of nitre, ſix grains—of camphorated julep, one ounce. To be taken as the former.

Clyſters of milk, water, and ſalt, are uſeful to carry off the putrid matter from the inteſtines; and laxatives of manna, cream of tartar, Glauber's ſalts, tamarinds, or rhubarb, are neceſſary to unload the bowels: acrid and ſtrong purgatives are to be avoided; but a ſtool or two procured by theſe gentle medicines at any time of the fever, when a nauſeous bitter taſte in the mouth, ſickneſs at the ſtomach, putrid or fœtid eructations or breaking of wind, or too great coſtiveneſs, a ſwelled belly, rumblings of the entrails, or griping pains, point out the occaſion.

After vomiting and a ſtool or two, very happy changes are frequently obſervable, even where the patient had laboured under inexpreſſible anxiety, load and oppreſſion on the ſtomach and breaſt, continual ſickneſs, belches, and hiccup: the exceſſive foulneſs of the tongue, ſickneſs and load, the loathſome taſte in the mouth, and the offenſive breath and eructations, ſhew what condition the ſtomach is in; and the abominable, ſtinking, black, and bilious ſtools, the neceſſity as well as advantage of a diſcharge in that way.

From the ſeventh to the fourteenth day, the efforts of nature to relieve herſelf by vomit and ſtools are generally made, and her regular operations ſhould always be aſſiſted; and ſomewhat larger doſes ſhould be given of the ſame gentle laxatives, which may be repeated as the ſymptoms and circumſtances of the caſe may require: but care muſt be taken to ſupport the patient, during the operation of theſe medicines, with cordial diet, drink, and medicine, if neceſſary; and for this purpoſe either of the laſt-mentioned juleps may be given as before directed.

Should a violent diarrhœa come on, or an immoderate diſcharge in that way threaten danger, recourſe muſt be had to proper aſtringents, ſuch as theriaca Andromachi, diaſcordium, tincture of roſes, or Port wine or claret boiled with cinnamon; but if the caſe be extremely urgent, a clyſter of the following compoſition.

Take of the white decoction, ſix ounces—of diaſcordium, two drams—of theriaca Andromachi, two drams—of tincture of roſes, or Japan earth, two drams.

The white decoction is prepared as follows.

Take one ounce of fine and pure chalk, powdered—gum Arabic, two drams—water, one pint and half. Boil to a pint, and ſtrain or pour off fine.

But no ſmall degree of caution is neceſſary in the uſe of aſtringent medicines: the diarrhœa may probably be critical, and in that caſe the ſuppreſſion of it may be attended with the moſt dangerous conſequences; and before theſe medicines are adminiſtered, it will be very proper to prepare the way for them by a ſmall doſe or two of rhubarb.

And here it may be neceſſary to remark, that however critical or ſalutary a diarrhœa may be at the height or in the decline of this diſeaſe, yet at the beginning it is generally prejudicial, eſpecially if the diſcharge is thin, crude, and profuſe.

But when, in theſe diſeaſes, a diarrhœa is accompanied with a moiſture of the ſkin, or a gentle breathing ſweat, it is then unqueſtionably beneficial; for though nature frequently attempts to diſcharge the putrid matter in malignant fevers by ſtool and vomit, yet her more conſtant effort is through the pores of the ſkin; nor is the event in any of theſe fevers to be judged of, or the recovery of the patient to be expected, till more or leſs of a ſweat has iſſued: when that happens, if it proves moderate, warm, and is equally diffuſed over the whole body, ſuch as is commonly called a breathing ſweat; if it comes on about the height of the diſeaſe, and if the pulſe grows more calm before it breaks out, and during it's continuance remains open, ſoft, and more regular; perſpiration, attended with theſe ſymptoms, is of the moſt ſalutary nature: but if the ſweat is profuſe, if it is cold and clammy, or partially confined to the head and breaſt, there is much more reaſon to fear, than hope, from ſuch an appearance. Profuſe ſweats at the beginning are frequently ſucceeded by a ſhivering, in which caſe they are extremely pernicious.

But as thoſe ſweats are always more favourable which are produced by the efforts of nature, than thoſe which are brought on by art; ſo they ought never to be driven out too ſoon, or forced on by violent and heating medicines, cordials, or the like; it is ſufficient that they are ſupported by drinking plentifully of diluting acidulated liquors, and ſuch gentle cordials as may promote, but not occaſion perſpiration.

Bliſters are in ſome inſtances neceſſary, in particular if the ſpots ſuddenly diſappear, if the ſinking pulſe ſhews that the circulation is languid, if the ſpirits are low, or the patient lethargic; but they are often improperly applied, eſpecially in the beginning, when the fever runs high, and does not require to be ſtimulated: and wherever ſeveral bliſters are applied, it is neceſſary that the patient ſhould drink plentifully of wine-whey, emulſions, and other demulcent or ſoftening diluting liquors, rendered moderately acid; without which, he may ſuffer as much from the remedy as the diſeaſe. Perhaps cataplaſms of warm ingredients to the ſoles of the feet and to the hands may in moſt caſes be ſubſtituted for bliſters.

The camphorated julep is a medicine excellently well adapted to putrid malignant fevers, promoting an eaſy ſweat, and bringing on compoſure of ſpirits and quiet ſleep, when even opiates fail: if, to each doſe, a ſmall quantity of theriaca Andromachi, diaſcordium, or elixir paregoricum be added, it's efficacy in both reſpects will be conſiderably advanced.

To prepare the camphorated julep—

> Take of camphor, one dram—of double refined ſugar, half an ounce—of gum Arabic, two drams. Grind the camphor with a few drops of rectified ſpirits of wine till it is quite ſoftened, then add the ſugar and the gum, previouſly reduced to a jelly by warm water, and rub all together till the ingredients are well mixed and united; and, laſtly, pour in a pint of ſtrong vinegar by ſlow degrees, continuing to ſtir till the whole is compleatly incorporated.

Two or three ſpoonfuls of this julep may be given as often as the ſtomach will bear it.

But the moſt efficacious, and perhaps moſt ſucceſsful medicine, remains yet to be mentioned; in putrid, malignant, and ſpotted fevers, the Peruvian bark hath produced the happieſt effects, and adminiſtered at proper times, and in due quantities, will not fail to contribute to the cure.

But before this medicine is given, the ſtate of the patient's body ſhould be enquired into; and if it is found to be coſtive, or if the belly is hard and ſwelled, a doſe of rhubarb, manna, or ſome ſuch gentle laxative, will be firſt neceſſary.

If the patient's ſtomach will bear the bark in ſubſtance, it is a preferable way of giving it; and in that caſe the following mixture may be adminiſtered, one, two, or three table-ſpoonfuls at a time, according to the ſtrength and condition of the patient, and as it will remain without occaſioning ſickneſs.

> On two ounces of powdered bark pour a quart of Port wine and water in equal

quantities. Shake them well together, and add as much of the elixir of vitriol, or Clutton's Febrifuge Spirit, and *ſyrup of oranges*, as will render it agreeable to the palate.—In cold phlegmatic habits, a larger proportion of wine may be neceſſary.

But as this medicine in ſubſtance, or even in decoction, will not with many perſons ſit eaſily on the ſtomach, the mixture which we recommended in nervous fevers will be found perfectly well calculated for this diſeaſe; and it will not only tend to ſtrengthen the ſolids, and prevent the blood from being farther diſſolved and corrupted, but alſo effect theſe deſirable purpoſes without ſhutting up the pores of the ſkin ſo much as the bark in ſubſtance often does: for, as we have before obſerved, though profuſe ſweats in theſe and moſt other fevers are prejudicial, yet gentle and eaſy perſpiration ſhould rather be encouraged than checked, and particularly at the height and in the decline of the diſorder, not only by a plentiful ſupply of proper diluting liquors, but, as theſe fevers often run to a tedious length, by cordial and ſupporting diet and drink, without which the ſtrength of the patient will be exhauſted before the arrival of that criſis which might give a favourable turn to the diſeaſe.

To anſwer this purpoſe, generous *red wine* is a noble, natural, gently aſtringent cordial, and when acidulated with the juices of Seville oranges or lemons, will prove of the higheſt ſervice at the height and in the decline of malignant fevers; it may alſo be warmed with aromatics, ſuch as cinnamon, orange rind, or tincture of red roſes, and a few drops of elixir of vitriol may be occaſionally added: and Rheniſh and French white wines diluted, make a ſalutary drink in fevers of this kind, to which may be added, as little inferior, ſound unadulterated cyder; and even London porter hath been lately recommended with apparent ſucceſs.

In our chapter on *infection*, we have given ſuitable directions for the prevention of theſe and other contagious diſeaſes. As that of which we now treat is more highly ſo than any other, the plague excepted, which is itſelf a ſpecies of the ſame diſtemper, it may be right to add the following cautions.

We would adviſe judges, jurymen, and other neceſſary attendants on courts of juſtice, to take a light decoction or infuſion of the bark pretty frequently, both previous to, and during the continuance of a ſeſſion, aſſizes, or other gaol-delivery, and in particular before coming into a court in the morning: acids to ſmell to on a handkerchief, or an orange or lemon divided, and often applied to the noſtrils, will be uſeful; and an indulgence in rather a larger quantity of wine than uſual, is at ſuch times neceſſary.

If any diſagreeable ſmell ſhould have offended the ſtomach, and occaſion nauſea or ſickneſs, dangerous effects may probably be prevented by having immediate recourſe to a gentle emetic; which may be repeated, if the firſt does not remove every diſagreeable ſymptom.

The ſame cautions may ſerve for thoſe who are engaged in attending the ſick, and who ought never to approach the bed without applying ſome acid to the noſtrils, and even as much as poſſible to the lips and mouth.

If the ſituation of the ſick will admit of removal, it ought to be to ſome place as remote as convenience will permit from other habitations. In gaols, and other public buildings of the like kind, a particular part of the building, diſtant from the reſt, ſhould be appropriated to the reception of ſuch as ſhall be attacked by any diſeaſe which has the leaſt appearance of putridity or malignancy. Indeed, all ſuch as fall ſick of theſe diſeaſes, in places immediately under the direction and juriſdiction of the public, may be very eaſily ſo kept apart from others, as to prevent in ſome degree the ſpreading of infection; and a proper a proper regimen with reſpect to air and cleanlineſs, may in ſuch caſes be enforced without great difficulty.

Not only the chambers of the ſick, but the whole houſe, ſhould be ſteamed with hot vinegar, ſprinkled with other acids, and fumigated with myrrh, lavender, and other aromatic herbs.

After a recovery from a diſeaſe of the putrid kind, air, exerciſe, a mild nouriſhing diet, and chalybeat waters, are to be adviſed; at a proper diſtance, a doſe or two of gentle purging phyſic, and infuſions of the bitter herbs with orange-peel, will contribute to reſtore the patient's health, and prevent the danger of a relapſe.

CHAP. VII.

Of Pleuriſies.

A Violent pain on either ſide of the breaſt, attended with an acute fever, is commonly called a *pleuriſy*; and that ſpecies of this diſorder, which is denominated the *true pleuriſy*, is occaſioned by an inflammation of the *pleura*, being the membrane which lines the breaſt. There are alſo other complaints of the like kind which affect the intercoſtal muſcles, or thoſe which are placed above and below the ribs, or that membrane which covers the ribs themſelves, and theſe are deſcribed as *ſpurious* or *baſtard pleuriſies*.

This diſorder generally attacks the ſtrong and laborious, ſuch as travel much or are expoſed to work in the open air, and ſuch in particular as are vigorous in conſtitution and of ſanguine habits.

The cauſes are, whatever can excite internal inflammation; and obſtructed perſpiration is the principal.

Drinking cold liquors after being heated with exerciſe; expoſing the body without cloaths in a ſweat; bathing in cold water when in ſuch a ſtate; violent exerciſe of any kind; a ſudden check to any eruptive diſeaſe; the ſtoppage of any accuſtomed drains or evacuations, whether natural or artificial; ſuffering the body to be affected with too great a degree of heat or cold; neglecting to purge, bleed, or uſe alterative medicines, at uſual and accuſtomed ſtated periods; and even, in ſome inſtances, blows or bruiſes, and other external injuries upon the breaſt, may occaſion pleuriſy fevers.

To prevent them, the only means is to avoid theſe cauſes, and to be cautiouſly regular in food, drink, exerciſe, phyſic, and even cloathing.

The ſymptoms are, heat, ſhivering, reſtleſſneſs, and thirſt; and theſe uſual indications of fever are followed in this by an acute pain in the ſide juſt above the ſhort ribs, reaching in ſome caſes to the throat, in ſome to the back, and in others to the ſhoulders; this pain is accompanied by a difficulty of breathing, watching, nauſea, redneſs, or fluſhing of the cheeks, phlegm, and a ſpitting of very yellow and bloody matter; which laſt is rather a favourable ſign, as without it a delirium or lethargic diſpoſition frequently comes on: the pain is increaſed by drawing the breath, and leſſened upon paſſing the air out of the lungs; if the pain ſhifts, it is a favourable ſymptom. The cough which attends this diſorder is ſometimes ſhort, dry, and extremely painful; at others it is accompanied with a diſcharge of matter, at firſt thin, but which afterwards becomes more thick and bloody; if the difficulty of breathing increaſes to ſuch a degree as to check the blood in it's paſſage through the lungs, ſuffocation will ſoon follow. The pulſe, in this diſtemper, is generally quick and hard, and the urine high-coloured; if a mortification takes place, the pain ceaſes of a ſudden, and the pulſe as ſuddenly becomes weak and ſmall, and at the ſame time continues quick and irregular; and in this caſe a delirium follows, and convulſions cloſe the ſcene. A ſuppuration ſometimes proves equally fatal, which is denoted by irregular chillneſs and ſhivering, and the pain becoming dull and throbbing; and the matter ſometimes points externally, and ſometimes is emptied into the cavity of the breaſt; whence it is in ſome caſes extracted by the operation called *empyema*, which is opening the breaſt, but is always attended with extreme danger: ſometimes the diſeaſe continues a fortnight before the matter is formed, but whenever it happens, the patient ſeldom eſcapes.

If the fever is violent, the heat intenſe, the cough dry, and the tongue foul and cruſted, a mortification may be expected ſoon, if a ſuppuration does not take place: a ſudden abatement of the ſtitch, without any apparent cauſe, but accompanied with a pale and ſad countenance, heavy eyes, and a feeble pulſe, are ſigns that the diſorder has affected the patient's brain, and the worſt conſequences may be dreaded; and this is alſo the caſe, when in this diſeaſe purple ſpots appear, which ſometimes, though rarely, happens.

The patient's room ſhould be kept rather cool than cold, and the liquid ſhould all be ſwallowed ſomewhat warm.

The diet ſhould be extremely light, ſuch as gruels, panada, or ſago; the drink, linſeed tea, barley-water, common emulſion, pectoral decoction, thin whey, a decoction of barley and red poppies; or a ſpoonful of linſeed unbruiſed, and half an ounce of liquorice root, infuſed in a quart of boiling water for a few hours, is alſo an exceeding good common drink, and wants only an ounce of the leaves of the herb colts-foot to make the pectoral infuſion: boiling the ſame ingredients till one third part is conſumed, gives the pectoral decoction.

Any of the foregoing drinks may be acidulated, and rendered more palatable, by a ſmall mixture of the jelly or ſyrup of black currants; and if the patient wants a ſtool, the decoction with raiſins and figs, as directed in acute or continual fevers, may be given occaſionally till it procures one.

Bleeding is indiſpenſibly neceſſary, previous to any other attempt to relieve; the ſtrength of the patient, pulſe, fever, violence of the pain, and difficulty of breathing, muſt determine the quantity: the quality of the blood ſhould be alſo nicely inſpected; if it is thick, ſizy, and covered with a ſtrong cruſt or coat, an inflammatory diſpoſition is indicated, and the patient will bear repeated bleedings. It is adviſeable, if the ſtrength of the patient will admit of it, to draw a pretty conſiderable quantity of blood at once: ſtrong conſtituſions will well endure the loſs of twelve or fourteen ounces, unleſs the patient ſhould faint, or the pulſe alter manifeſtly in the courſe of the operation; but if the expectorated matter, or that which is ſpit up, is already ſtreaked with blood, and appears digeſted, bleeding muſt be omitted.

If the ſymptoms continue violent, and in particular if the pain in the breaſt or ſide remains unabated, a repetition of this operation will be neceſſary, and even a third, or oftener, as circumſtances direct, and as from the heavy, ſizy appearance of the blood, may appear to be requiſite; taking care to allow proper intervals, and not to exhauſt the patient's ſtrength too ſuddenly.

Emollient clyſters of linſeed or mallows, tea, and milk, ſhould immediately ſucceed bleeding, eſpecially if the body is coſtive; which not only empty the inteſtines of hardened excrements and wind, but alſo draw a greater quantity of blood downwards, and in both reſpects eaſe the ſuperior parts: but it is not neceſſary to promote any very conſiderable diſcharge by ſtool; we ſhould not increaſe the fever by ſuffering the body to be coſtive, nor exhauſt the ſtrength, or ſuppreſs the ſpitting, by rendering it too looſe.

Fomentations of linſeed, camomile flowers, elder flowers, or common mallows, boiled in water, ſhould be applied to the part affected, either by putting the herbs themſelves in flannel, and holding them to the ſide, or by dipping flannel cloths in the decoction, ſqueezing them moderately dry, and applying them as warm as the patient can bear; and, as theſe cool, ſupplying warm ones. Bladders filled with the ſame decoction, or any other warm liquid, may alſo be applied to the part, which may likewiſe be frequently rubbed with æther or opodeldoc; but great care muſt be taken, that the patient does not get cold in expoſing his body to theſe ſeveral operations. Theſe fomentations may alſo be uſed to the belly and about the groins, which may take down the too great ſtricture of the fibres in general, and leſſen the impetuoſity of the blood.

Bliſters may alſo be applied to the ſeat of the pain, if the fomentations prove ineffectual to remove it; ſome adviſe them alſo between the ſhoulders, and others on the legs: if the bliſter on one ſide ceaſes to diſcharge freely, and the pain continues obſtinate, it may be adviſeable to try another on the other ſide.

The following plaſter hath alſo been applied to the part after the fomentations, with very good ſucceſs.

> Take of Burgundy pitch, one pound—yellow wax, one ounce—cumin-ſeeds, carraway-ſeeds, and bay-berries, of each one ounce. Melt the pitch and wax together, and having reduced the ſeeds to powder, ſprinkle them in, and ſtir all well together: this is what is commonly called the cumin plaſter. To a quantity of this, ſufficient to ſpread a plaſter which may cover the part affected, add one dram of opium, and one ſcruple of camphire, and rub them well with the former compoſition.

If warm, emollient, general baths, for the whole body, were eaſily attainable, they might no doubt be uſed to conſiderable advantage in this diſeaſe; and wherever an opportunity offers, we would recommend their being tried.

Leaves of different plants, applied warm to the ſide, are ſaid to have procured relief; thoſe of cabbage or any other of the like ſize and conſiſtence; and bleeding with leeches on the part, or cupping with ſcarifications, are alſo adviſed.

To promote expectoration, ſome direct half an ounce of the oxymel or vinegar of ſquills, to be added to three ounces of the pectoral decoction, and a table-ſpoonful or two of it to be taken occaſionally. Others recommend oil of ſweet almonds, ſyrup of violets, ſpermaceti, and ſugar-candy, in equal quantities, of which an electuary being formed, the patient may take a tea-ſpoonful frequently, or whenever the cough is particularly troubleſome.

The following draught may be uſed, which will ſerve to cool the blood and promote gentle perſpiration, eſpecially if the ſkin is hot and dry.

> Take of the julep of camphire, one ounce and a half—cinnamon water and pectoral ſyrup, of each one dram—nitre, ten grains.

Theſe draughts may be repeated every ſix hours, and when the fever is conſiderably abated, if a thin defluxion on the lungs is troubleſome, a ſmall quantity of elixir paregoricum may be added.

In the beginning of this diſeaſe, and after the neceſſary evacuations, a decoction of Seneka root is ſaid to be almoſt a ſpecific.

> Take of Seneka rattle-ſnake root, two ounces—water, three quarts. Boil till it is re-

duced one third, and pour or ſtrain it off fine: diſſolve it in two ounces of white ſugar candy.

Two or three ſpoonfuls of this decoction may be taken three or four times a day; if it ſhould occaſion ſickneſs or vomiting, the doſes may be ſmaller and more frequent; or a ſmall quantity of ſimple nutmeg or cinnamon water may be added to each doſe.

If the heat and inflammation continue violent after the firſt bleeding, a cooling purge of manna, rhubarb, ſenna, or Glauber's ſalts, is by ſome recommended, as tending to allay the inflammatory ſymptoms; but in the adminiſtration of purging medicines, it will be neceſſary to act cautiouſly, and conſult the ſtrength of the patient, and the particular appearance of the ſymptoms. Terrifying ſymptoms ſometimes appear at the height or criſis of this diſeaſe; ſuch as an almoſt ſuppreſſed breath, convulſions, and a fluttering, interrupted pulſe; yet though from theſe appearances a mortification may be apprehended, and melancholy conſequences expected, yet ſometimes theſe ſymptoms turn out to be critical, and an almoſt immediate cure often follows when the approaches of death are dreaded. On theſe occaſions, ſhould a gangrene really have taken place, the efforts of medicine will be in vain; but ſhould theſe ſtruggles prove to be the endeavours of Nature to throw off the diſeaſe, ſhe will only require to be aſſiſted by diluting liquors, and to be ſupported, if the patient's ſtrength or ſpirits ſhould fail, with the addition of a ſmall quantity of wine in whey, negus, or food.

It may be neceſſary to add an obſervation or two, which may ſerve to regulate the treatment of this diſeaſe, where, from particular circumſtances, it requires variation from the uſual methods.

It has been remarked, that the air and weather have a very conſiderable influence, both in the cauſes, and degrees of violence, of theſe diſeaſes; in very cold, dry ſeaſons, they are found exceedingly common, and even epidemic; and in high, cold ſituations, much expoſed to north-eaſt winds, they are epidemic, and peculiarly prevailing; and in ſuch ſituations, bleeding is particularly required.

But in low, warm places, near the ſea, and in continued wet, moiſt, or foggy weather, patients in pleuritic caſes neither require, nor will bear the loſs of much blood; and in ſuch caſes this diſeaſe is frequently carried off without bleeding, or with taking off only a very moderate quantity of blood.

There are alſo ſome complaints of pleuritic appearance, in which the pains in the ſide are merely ſymptomatic; ſuch are thoſe which precede eruptive diſorders, and attend putrid or malignant fevers: as theſe pains ariſe from acrimony, and not from inflammation, they are to be removed by diluting, ſweating, and bliſtering, and not by drawing blood.

The *baſtard pleuriſy* is an inflammation of the intercoſtal muſcles, or thoſe which paſs over and under the ribs: the cauſes, ſymptoms, treatment, and cure, are nearly ſimilar to thoſe of the true pleuriſy, from whence it is principally diſtinguiſhed by the pain being more external, and by a perceivable ſwelling at the ſeat of it, which is extremely tender to the touch, and prevents the patient from lying on the ſide affected.

The ſymptoms are in general leſs ſevere; the difficulty of breathing and oppreſſion of the breaſt not ſo great; the general inflammation not ſo violent; the cough without expectoration; and, as the lungs are leſs apt to be affected, a mortification doth not often take place, and ſuppuration is attended with but little danger.

For the cure, bleeding muſt be proportioned to the hardneſs and ſtrength of the pulſe; the nitrous, cooling, and opening medicines may be adminiſtered; the fomentations and embrocations with æther and the volatile liniment uſed, and bliſtering, cupping, and ſcarifying, or plaſtering the part, as exigencies may require: the decoction of Seneka may alſo be taken; and, if a ſuppuration threatens, it may be encouraged by bladders of warm water and poultices. This diſeaſe is of ſhorter duration than the true pleuriſy, ſeldom continuing above ſix, ſeven, or eight days.

There is alſo another diſeaſe which is nearly allied to pleuriſies; being excited by the ſame cauſes, and marked by ſymptoms not greatly differing.

This is denominated the *paraphrenitis*, or inflammation of the *diaphragm*, which is commonly called the *midriff*, and is that muſcular part which ſeparates the breaſt from the belly.

In this diſorder the pain is violent, being ſeated in the lower part of the breaſt under the ſhort ribs, and ſtriking from them to the back. The fever is acute, and generally attended with a conſtant delirium; the belly is drawn up to avoid the motion of the muſcles in breathing, which of conſequence is quick, ſuffocating, and difficult. The patient is often affected with ſickneſs, and ſometimes with involuntary laughter, hiccups, convulſions, and even madneſs; the pulſe is quick, irregular, and ſmall: and the pain is not only augmented by drawing the breath, but alſo by coughing, ſneezing, an over full ſtomach, nauſea, and vomiting; as well as by the neceſſary compreſſion of the belly in voiding excrement or urine, and every motion that tends to diſturb thoſe muſcles where the diſeaſe is ſeated.

If ſuppuration happens in this diſorder, it is generally fatal: the fomentations and embrocations, together with emollient clyſters, are therefore peculiarly uſeful; as the former may prevent the formation of matter, and the latter not only relaxes the bowels, but draws off the weight and relieves the ſtricture on the affected part.

After any of the pleuritic diſeaſes are effectually removed, a temperate and light diet, with cleanſing liquors, air, and moderate exerciſe, will aſſiſt in confirming the cure.

CHAP. VIII.

Of the Peripneumony, or Inflammation of the Lungs; and of the Pleuro-peripneumony, or Complication of the Pleuriſy and Inflammation of the Lungs.

THESE diſeaſes are ſo common, either as original maladies, or conſequent to ſome other, that they call for very diligent attention, and the niceſt obſervation.

Inflammations on the lungs affect one of the principal organs of life, are frequently attended with the utmoſt danger, and require very different treatment in their very different ſtages.

This diſorder is divided into three diſtinct kinds; the *true*, or inflammation in the lungs; the *ſpurious*, or when a thick glutinous matter obſtructs the veſſels of the lungs; and the *catarrhous*, when it is occaſioned by a thin, ſharp, defluxion on the lungs.

Perſons of ſanguine habits, and thoſe who live freely, both as to food and liquors, are moſt liable to theſe complaints: the conformation of the body, and the previous ſtate of health, alſo contribute to the violence of the ſymptoms; in flat-breaſted and narrow-cheſted perſons, and ſuch as are aſthmatic, they are generally ſevere.

The cauſes of the *true peripneumony*, or *inflam-*

inflammation of the lungs, may be either in the air; from cold applied to the mouth, ſtomach, or ſkin of other parts of the body; violent exerciſe of the lungs, in running, wreſtling, ſtraining the voice, or the like: and generally, whatever tends to excite pleuriſies, will alſo occaſion inflammations in the lungs; which, alſo, frequently accompany or ſucceed, and are the conſequences of pleuritic diſorders.

The general ſymptoms, or thoſe which are common to the ſeveral ſpecies of this diſeaſe, are a load at the breaſt, a ſhort and difficult breathing, a cough, and more or leſs of a fever; and theſe are alſo ſymptoms of the pleuriſy: but there are ſome particulars in which the ſigns are different; the breathing is attended with a kind of ſnoring noiſe, the cough is more acute than that which attends a pleuriſy, and the air from the lungs is peculiarly hot. Inflammations of the lungs are alſo attended with a greater degree of reſtleſſneſs from the very beginning, and the pulſe is generally more ſoft, though frequently quick and intermitting; before bleeding it is ſometimes ſo low as hardly to be felt, but riſes and grows more ſtrong after that operation; and the urine is thick and diſturbed. If the ſymptoms are violent at firſt, the patient will only be able to lie on his back, and that with extreme difficulty, an erect or upright poſture affording him moſt eaſe, the paſſage of the blood through the lungs being ſo obſtructed as to threaten ſuffocation. As the diſeaſe advances, the veins in the neck ſwell; one arm ſeems dead, and as if affected with the palſy, and the pulſe becomes totally irregular; the cheeks, eyelids, and tongue, ſwell; the eyes grow dull; and, in ſome inſtances, eſpecially in hot ſeaſons, the breaſt and neck are marked with livid blotches: a confuſed, low delirium ſucceeds, which is ſometimes indicated, in the beginning of the diſeaſe, by a vacant air on the countenance, and a wild importunate ſtare of the eyes; and if relief is not obtained, the anguiſh becomes inexpreſſible, and the patient dies in a ſuffocation.

If the pulſe is ſoft, irregular, and ſmall; if the attack is violent, and the ſymptoms proceed with rapidity; if horror, anxiety, and ſhiverings, are ſucceeded by intenſe heat; if the diſeaſe appears to have affected the patient's reaſon in the early ſtages of it; if the ſtools are frequent and thin, and a perpetual inclination to that evacuation offers; if the urine is clear, and without ſediment or cloud; if the patient is not kept in his bed without difficulty; and if a great change of countenance is apparent; extreme danger may be apprehended.

But when, on the contrary, an expectoration of bloody matter comes on, in vigorous conſtitutions, ſo early as the fourth or fifth day, and ſpontaneous ſweats break forth in a day or two after; when the urine drops a whitiſh ſediment—and when the ſame events take place in more languid habits from the tenth to the fourteenth day; if the patient's ſleep is leſs diſturbed, his pulſe more regular and ſoft, and his ſtrength does not appear to be greatly impaired; flattering hopes may be entertained that the diſeaſe will terminate favourably.

The regimen may be nearly the ſame as that recommended in pleuriſies, but rather more thin; and a conſiderable degree of caution is neceſſary, as to the admiſſion of freſh air into the patient's room; which, if it be ſuffered to approach him too ſuddenly, or in too great a degree, may check the expectoration, and create immediate danger.

The liquors ſhould be cooling, diluting, and relaxing: ſuch as very thin whey; the barley-water, with figs, raiſins, and liquorice; tea; infuſion or decoction of the pectoral herbs, ſuch as ground-ivy, maiden-hair, hyſſop, and colts-foot; and theſe ſhould be acidulated with juice of lemons or oranges, and may be ſweetened with honey. All or any of theſe liquors, changing

ing them frequently to avoid palling the ſtomach, may be taken by turns; but they ſhould be drank moderately warm, and in ſmall quantities at a time, rather ſipping them continually, than ſwallowing draughts of them; for by this means much of the reſolving relaxing vapour is alſo drawn into the lungs, and probably much abſorbed by their imbibing veſſels; ſo that relaxing and diluting are thus both doubly and effectually carried on: indeed, large draughts ſhould not be taken down at once in any diſorder, but particularly in this; for, by overcharging the ſtomach, they produce wind and indigeſtion, as hath been before remarked, and in this diſeaſe, by forcing up the midriff, render breathing more difficult.

To diluting and cooling liquors muſt be added (under proper precautions) cooling air; nor can thoſe who ſuffer the violent paroxiſms of this diſorder bear motion of body or agitation of mind. Perſons labouring under aſthmatic complaints are obliged to keep a quiet poſture, and to breathe the cool air, or they are in danger of ſuffocation; and how much more are theſe indulgences neceſſary in a diſeaſe where there is not only an obſtruction in the veſſels of the lungs, but an inflammation in their very ſubſtance! cloſe, narrow, and ſtifling rooms, are incommodious to thoſe who are afflicted with any diſorder, but much more ſo to thoſe who ſuffer under that of which we treat, the moſt troubleſome complaint of which is, the extreme difficulty of breathing; if ſuch cloſe rooms cannot be avoided, they ſhould be frequently, but prudently aired.

The cure depends, in almoſt every caſe, on bleeding and promoting expectoration; and though the efforts of nature will ſometimes effect it by the latter evacuation only, by ſome critical hæmorrhage or diſcharge of blood, or by an inflammation taking place in ſome other part of the body, yet it would be extremely dangerous to wait till a criſis of either kind ſhall preſent itſelf, as in moſt caſes it may not offer at all, and in others not till the patient is become too weak to ſupport it, or the diſeaſe is too deeply rooted to be removed by either of theſe means.

Bleeding being abſolutely neceſſary, this operation cannot be performed too early; and it will be right to take a conſiderable quantity of blood at once from a large orifice: the ſtronger and more ſanguine the habit, the more blood ſhould be drawn, even to twelve, fourteen, or ſixteen ounces; yet to ſtop on the appearance of faintneſs, cold ſweats on the forehead or face, yawning, or other indications of inability to ſupport the loſs of a farther quantity. But theſe ſymptoms may in general be prevented by bleeding the perſon as he lies on a bed, which will be extremely proper in caſes which depend ſo much on drawing off conſiderable quantities of blood. The age and ſize of the patient ſhould alſo be conſulted in drawing blood; corpulent or fat perſons do not in general bear bleeding as well as the lean and muſcular; nor are the very young or very old the properest ſubjects of this evacuation, though it is ſometimes neceſſary to be performed on both.

If the ſymptoms are not relieved by the firſt bleeding, more blood ſhould be drawn after eight, ten, or twelve hours, or even ſooner, if they become more aggravated; and this muſt be repeated, if the fever, oppreſſion, anxiety, and difficulty of breathing, increaſe or continue without abatement, eſpecially if the blood appears firm and of a cloſe and heavy texture, or covered over with a tough, yellowiſh, coat or buff; which, however, does not always appear till the ſecond or third bleeding, though the ſymptoms may indicate ſo high a degree of inflammation as to require theſe frequent bleedings, and the want of this appearance is owing to the blood flowing from a ſmall orifice, and trickling or oozing down the arm.

This heavy, cloſe, and buffy appearance of the blood, with a ſtrong, full pulſe, will warrant the continuing to bleed till the breathing is become more free and eaſy; but if the maſs is of a looſe texture, and not covered with ſuch a ſizy coat or buff; if the pulſe ſeems to ſink and flutter, or grows more weak and ſmall on bleeding; it is time to deſiſt: more eſpecially when a bluiſh film appears on the blood, with a ſoft greeniſh jelly beneath, and the whole texture is looſe and ſoft, with a muddy, reddiſh, or green ſerum; all which are ſigns that the blood is not in ſuch a ſtate as to admit of large quantities being taken away.

A ſtrong, throbbing, quick pulſe, in theſe diſorders, always calls for farther bleeding, at leaſt till ſome degree of eaſe in breathing, or the expectoration of promiſing matter, is obtained. But it frequently happens, that the pulſe, even at the beginning of inflammations on the lungs, ſeems oppreſſed, irregular, low, and intermitting, the patient at the ſame time complaining of great languor and weakneſs, which would ſeem to contradict any deſign of letting blood, and yet the load and heat at the breaſt, anxiety, and difficulty of breathing, demand it; but in theſe caſes it ſhould be conſidered, that ſuch a ſudden falling off of ſtrength, ſpirits, and pulſe, doth not ariſe from want of blood, as the duration of this diſeaſe for a few hours, or even a day or two, cannot be ſuppoſed to have exhauſted the vital liquid in any conſiderable degree; the truth is, that the real occaſion of theſe ſymptoms is an exceſs, and not a defect of blood, as is evident on bleeding perſons in this ſituation, whoſe pulſe always riſes upon the performance of this operation.

Emollient clyſters, in each of which one ſcruple of nitre hath been diſſolved, ſhould be frequently adminiſtered; and the diluting drinks may be rendered agreeably acid by a quantity of nitre, or of Clutton's Febrifuge Spirit, ſufficient for that purpoſe.

Bliſters between the ſhoulders, and to the ſides, may alſo be applied in caſes of emergency; and particularly if the expectoration ſtops, not giving way to any other evacuation, it may be proper to bliſter the legs.

The decoction of Seneka rattle-ſnake root, given as directed in pleuriſies, at proper intervals, will be of conſiderable uſe.

When the matter begins to expectorate freely, and appears of a yellowiſh colour, bleeding ceaſes to be adviſeable, and either of the following draughts may be given to promote the ſpitting; but no medicines of this kind ſhould be adminiſtered till nature indicates a diſpoſition to relieve the patient in this way.

Take pure water, one ounce and half—ſpermaceti diſſolved with yolk of egg, half a dram—nitre, one ſcruple—pectoral ſyrup, one dram. Make a draught, to be taken every fourth hour.

Or, take pure water, one ounce and half—ſpermaceti diſſolved as above, half a dram—ſalt of hartſhorn, half a ſcruple—cinnamon water and balſamic ſyrup, of each one dram. To be taken every ſixth hour.

Or the following emulſion:

Of the balſamic ſyrup, one ounce and half—of gum Arabic powdered, two drams. Mix with the ſyrup, and add oil of ſweet almonds, three ounces—pure water, one ounce and half.

Of this mixture two or three ſpoonfuls may be taken every fourth, fifth, or ſixth hour.

Gum ammoniac is alſo uſually preſcribed, to promote expectoration in theſe caſes, in the following draught.

Take of the milk of ammoniac, four ounces—of the balſamic ſyrup, ſix drams. Make into two or three draughts, according to circumſtances, and adminiſter every fourth, fifth, or ſixth hour.

The milk of ammoniac is prepared as follows.

Diſſolve half an ounce of the beſt gum ammoniac in one pound of pennyroyal water.

But ſome are of opinion, that the emetic tincture, or antimonial wine, in ſuch doſes as will juſt keep up a nauſea, are of more extenſive efficacy.

Vapours from warm water may be frequently received into the lungs with the breath, by holding the mouth and noſtrils over narrow-mouthed veſſels filled with it, or with teas of any of the pectoral herbs.

In the adminiſtration of oily or gummous mixtures, and other expectorants, care muſt be taken that they do not bring on any conſiderable degree of purging, which ſuppreſs the expectoration, and endanger the patient's life.

When the matter that is ſpit up is very thin and acrid, ſmall doſes of opiates may be given; but great moderation and caution is neceſſary in the adminiſtration of theſe medicines.

This diſorder ſometimes ends in a vomica, or abſceſs on the lungs; which, in ſome caſes, proceeds rapidly, and deſtroys the patient by ſuffocation; and in others more ſlowly, in the form of a confirmed conſumption: in the former caſe, when the matter falls into the cavity of the breaſt, it can only be extracted by the operation of the empyema, or inciſion into the breaſt, which we have formerly mentioned; and the latter caſe muſt be treated according to the directions which we have given under the article of *conſumptions*.

The ſuppuration takes place frequently after the removal of the inflammatory ſymptoms, and may be ſuſpected, if the pulſe continues quick, though ſoft; if the cough and difficulty of breathing remain after the pain has in a great meaſure ceaſed; if the patient feels ſlight ſhiverings ſucceeded by heats; if his fleſh waſtes, and his ſtrength rather leſſens than returns; and if he feels a diſability to lie on the contrary ſide to that which is affected.

The *peripneumonia notha*, or *baſtard peripneumony*, differs conſiderably from the true peripneumony, or inflammation on the lungs, in the ſymptoms and appearances, and attacks very different conſtitutions.

The true peripneumony generally ſeizes the robuſt, vigorous, and active; and is moſt frequent in cold, dry weather, and during the reign of continued north eaſt winds: but baſtard peripneumonies attack the old and phlegmatic, the weak and relaxed, the fat and the unwieldy, and prevail moſt in the winter ſeaſon, and in wet, moiſt, and foggy weather; thoſe who are ſubject to coughs, or who drink largely of ſpirituous liquors, are peculiarly liable to this diſorder.

The baſtard peripneumony may be occaſioned by the weather and diſpoſition of the air; by a putrid tendency in the juices; by the ſtoppage of any uſual diſcharge, ſuch as perpetual bliſter, iſſue, ſeton, or old ulcer; or by a weakened ſtate of the lungs, from a tumor formed there: but the more immediate cauſe is, a pituitous or glutinous matter which obſtructs the veſſels of the lungs.

The ſymptoms of this diſeaſe are by no means ſo immediately violent as thoſe of the true peripneumony or actual inflammation of the lungs; it creeps on ſo ſlowly, and almoſt imperceptibly, as frequently to ſurprize the patient with danger before he has felt himſelf much indiſpoſed. It begins with a ſlight wearineſs, or rather indolence, and proceeds with weakneſs, loſs of ſtrength, depreſſion of ſpirits, ſhort and heavily drawn breath, and a pain, or rather a load and oppreſſion of the breaſt; yet though theſe complaints prove that the lungs are affected in a conſiderable degree, the fever and heat are ſo trifling, as to be hardly ſufficient to convince the patient of his diſorder: ſome ſlight ſhiverings and alternate heats afterwards come on, with quickneſs and irregularity of pulſe; which, notwithſtanding, is low, and the difficulty of breathing increaſing to a degree of violence, and the weakneſs becoming univerſal and inſupportable, death enſues, when ſo fatal an event is not even apprehended. In ſome caſes, however, the cough is extremely troubleſome; the patient complains of giddineſs, or an acute pain in the head; vomits up all liquids, ſometimes with the cough and ſometimes without; his tongue grows foul; the urine pale-coloured and of a diſturbed appearance; the blood taken away reſembles that which is drawn in pleuriſies; the pain of the head is inexpreſſibly great on any attempt to cough; the whole breaſt is diſordered; a wheezing is obſerved to attend the fits of coughing; the eyes are inflamed, and the cheeks red and fluſhed.

The regimen muſt be ſuch as is directed in the true peripneumony, the diet extremely light, and the drinks diluting and cleanſing; infuſions of the pectoral herbs, hyſſop, pennyroyal, or ground-ivy, with liquorice-root, muſtard whey ſharpened with lemon juice, or a decoction of madder roots, may be uſed as common drinks: any of theſe drinks may be ſweetened with honey; but the ſame dilution is not neceſſary as in the true peripneumony, nor doth nature call for it by any great degree of thirſt.

This kind of diſeaſe ought to be treated with the more circumſpection, becauſe the mildneſs of the ſymptoms is apt to deceive the patient and thoſe about him: it is not unfrequently taken for a fit of hypochondriaciſm, but a few hours ſhew the fatal miſapprehenſion; and an unremitting oppreſſion on the breaſt, lethargic ſleepineſs, dark lead-coloured nails and viſage, and cold extremities, point out immediate and too often unavoidable danger.

Bleeding, in this diſeaſe, muſt be practiſed with extreme caution; when common feveriſh ſymptoms appear, it may be neceſſary in a ſmall quantity; ſome, indeed, recommend in moſt caſes to begin the cure with a bleeding proportioned to the ſymptoms, though rather ſmall, but it does not ſeem adviſeable to repeat the operation; and it is particulary neceſſary in this caſe, that the patient ſhould be bled as he lies down, to avoid the danger of fainting, which might be prejudicial where the ſtrength and ſpirits ſuffer ſo conſiderably.

Bliſters ſhould be applied between the ſhoulders; and, as circumſtances require, to the ſides, arms, and even the legs: ſhould the latter be found neceſſary, it will be right, as the limbs are apt in this diſorder to become coldiſh and inſenſible, to rub them well with a fleſh-bruſh, or the hand, before the bliſtering plaſters are applied, and afterwards to wrap them up in flannels, which will very much promote the riſing of the bliſters, and of conſequence the diſcharge.

Softening, diſſolving, and ſtimulating expectorants, ſuch as we have preſcribed in the former part of this chapter, will be uſeful; to theſe may be added emetics, of the emetic or antimonial wine, in ſmall quantities, juſt ſufficient to excite a nauſea, and promote the diſcharge of the diſeaſed matter from the lungs.

Purges are alſo recommended, but they ſhould be of the mildeſt kind, as violent ones are apt to occaſion faintneſs, cold ſweats, and other weakening ſymptoms; in caſe this ſhould happen, the patient ſhould be ſupported with weak broths, or other nouriſhing food.

But if the matter is already concocted, and the patient ſpits copiouſly, neither bleeding or purging are neceſſary. Mild clyſters, and ſuch gentle opening medicines as tend only to cleanſe the inteſtines, ſuch as manna, rhubarb, or the like, and thoſe ſparingly adminiſtered, will be ſufficient: the expectoration may be promoted by any of the diluting liquors which we have mentioned, and the patient may be ſupported by the addition of a little white-wine.

Saline draughts of the following compoſition will alſo be proper.

Pure water, three ounces—ſalt of hartſhorn, one ſcruple—lemon juice, ſix drams (or in want of lemon juice, diſtilled vinegar, four drams) balſamic ſyrup, and alexiterial water, of each half an ounce. Make two draughts, one to be taken at the diſtance of ſix hours from the other, and to be repeated as occaſion may require. Simple waters of mint, or other herbs, may ſupply the place of the alexiterial water.

A pectoral draught may alſo be uſed.

Take of the milk of gum ammoniac, one ounce and half—ſpermaceti diſſolved with yolk of egg, one ſcruple—ſalt of hartſhorn, half a ſcruple—cinnamon water, two drams—balſamic ſyrup, one dram.

To be taken as directed for the laſt preſcription.

However violent the cough may be, opiates muſt be uſed with great caution and diſcretion, and by no means until the expectoration is eaſy: when the decoction of Seneka root may alſo be ſerviceable.

The powder of Benzoin, or gum Benjamin, has alſo been recommended to be ſtrewed on hot coals or a heated iron, and the fumes drawn into the lungs with the breath.

After the diſeaſe is removed, the decoction of Peruvian bark will contribute to reſtore the patient's ſtrength; and change of air, gentle exerciſe, and aſſes milk, will aſſiſt to confirm his health.

The *catarrhous peripneumony* is diſtinguiſhed from the laſt mentioned diſorders, by the cough being more frequent and violent, occaſioned by a defluxion of thin and acrid matter on the lungs: in this caſe opiates may be uſed rather more freely after the expectoration has been promoted, as before directed; and ſtorax pills are recommended to quiet the cough, in ſuch doſes as circumſtances may point out.

The regimen, as to diet and liquors, and the treatment, may be generally ſuch as is directed in the other ſpecies of the peripneumony.

The *pleuro-peripneumony* is a complication of two diſeaſes: the *pleuriſy*, or *inflammation of the pleura*; and the *peripneumony*, or *inflammation of the lungs*.

If the deſcriptions which we have already given of both theſe diſeaſes be attended to, there will be no difficulty in diſcovering the caſe of the unfortunate patient, in which the ſymptoms of each of thoſe diſorders unite. It may be proper to remind our readers, that the principal apparent difference between the ſymptoms of the pleuriſy and peripneumony is, that in the latter the pulſe is generally leſs ſtrong and violent, and the difficulty of breathing, and all the complaints of weight, oppreſſion, and pains at the breaſt, are in moſt inſtances more troubleſome.

Hence it will appear, that, happily for the patient, the method of cure which is applicable to one diſorder, will not (as in many other unhappy circumſtances of complicated diſeaſes) prove prejudicial to the other; and, perhaps, the only variation in treatment ought to ariſe from a very particular attention to the pulſe, which will regulate the bleeding ſo as not to exhauſt the ſtrength of the ſick in too great a degree, or to repeat it after the diſeaſe has made a certain progreſs.

In the pleuro-peripneumony it may alſo be obſerved, that the pains often continue, more or leſs, a conſiderable time after the fever is quite gone off; and in theſe caſes relief is not to be ſought from repeated bleedings, but from a free and copious expectoration, without which it very ſeldom ends well; and the more early this diſcharge, which may be conſidered as the natural criſis of this diſorder, is brought on, the better. At the beginning, the expectorated matter is generally crude and thin, but ſoon becomes of a yellowiſh white, and better conſiſtence; and when matters proceed rightly, it is commonly ſtreaked with blood about the third day, or the blood is at that time ſo incorporated with it as to give it a bloody tinge; and this kind of matter, when freely thrown off, gives great relief to the reſpiration, pain, and oppreſſion of the breaſt, and frequently terminates the diſeaſe in ſeven or eight days.

As both the diſorders which unite to compoſe this of which we now ſpeak are inflammatory, it will not be neceſſary to repeat, that a light and reaſonably cooling diet, and a moderate quantity of mild, ſoftening, diluting liquors, are eſſentially uſeful; or that pectoral and (according to the ſymptoms) nitrous draughts, and medicines which promote expectoration, are adviſeable in the different ſtages of the pleuro-peripneumony.

But if an inflammation of the lungs is in itſelf a diſorder attended in all caſes with danger, and the pleuriſy is always a painful, and often a very obſtinate diſeaſe, the union of theſe two maladies muſt unqueſtionably occaſion accumulated doubt and difficulty, and require the utmoſt caution and circumſpection, not only in the treatment of the diſeaſe while it exiſts, but in the ſubſequent care and conduct of the patient in his recovery; for he will be found peculiarly liable to fall back, and relapſes in theſe caſes are frequently of worſe conſequence than the original attack.

The precautions to be particularly enforced, are to avoid taking cold, or heating the body by any extraordinary motion, or the blood by any kind of exceſs; to go much, but guardedly into the air; to uſe conſtant, but gentle exerciſe; and nouriſhing, but light, mild, and eaſily digeſted food.

CHAP. IX.

Of the Miliary Fever.

THIS is a fever of the eruptive kind, and takes it's name from the ſmall puſtules or bladders which appear in the ſkin, and are thought to reſemble in ſome meaſure the millet-ſeed: theſe puſtules are at firſt full of a clear whey-like matter, but afterwards this ſerum becomes whitiſh or pearl-coloured, ſometimes they are all reddiſh, and at others red and white mixed.

The cauſes of this diſeaſe are generally deſcribed to be ſuch as occaſion nervous fevers; want of ſleep; violent, or ſuppreſſed evacuations; bad, poor, and unwholeſome proviſion; foul, ſtinking, or ſtagnate water; unripe fruits, or too great quantities of ſuch as are cold and windy; and a moiſt, heavy air. To theſe may be added, want of exerciſe, intenſe application of the mind, and exceſs of the paſſions; and the more immediate cauſe ſeems to be, an acid acrimony in the blood.

Thoſe are moſt liable to this diſorder, who are of a phlegmatic, or a weakly and relaxed habit of body; the laborious, active, and middle-aged, are ſeldom ſubject to it. Women are more often attacked by it than men, thoſe of delicate conſtitutions, and who lead ſedentary lives; and women who are great with child, and in general unable and unwilling to uſe much exerciſe: and it is on this account that they are frequently ſeized with this diſeaſe in child-bed; but it is not, as has been generally ſuppoſed, peculiar to that ſituation; the ſame cauſes would produce the ſame effect, if the patient was not in that particular condition.

The *miliary fever* is ſometimes an original diſeaſe, but at others is only ſymptomatic;

tomatic; and, in that way, frequently attendant on the continued, malignant, and nervous fever, as well as on other eruptive diſeaſes, ſuch as the meaſles and ſmall-pox, eſpecially when the medicines or regimen have been too heating.

The preceding ſymptoms of this fever are a languor of body, and imbecility or weakneſs of mind, which diſpoſes it to be diſturbed by the impreſſions of anger, grief, fear, or the like; and in ſome caſes, it may be immediately the effect of ſome long and painful antecedent diſorder.

Pains about the back, loins, belly, and ſides, are the firſt approaching ſymptoms; and thoſe pains reſemble cholic, gravel, or rhuematiſm; and in women, even thoſe of labour. On the abatement of thoſe pains, ſlight ſhiverings and fluſhes, or rather alternate cold and heat, affect the whole body, and the heat is particularly intenſe in the palms of the hands; the pulſe is low and weak, but generally quick; the ſpirits depreſſed; an oppreſſion and great weight on the breaſt, with reſtleſſneſs, anxiety, and difficulty of drawing breath; ſleepleſs days and nights, without pain in the head, or delirium; pale-coloured urine, and ſometimes a white cruſt on the tongue, but at others it appears as in health. Theſe ſymptoms may be conſidered as ſigns that the eruptions are about to appear, and they continue, (when the diſeaſe is not violent) as we have deſcribed, till the puſtules riſe, after which they commonly abate conſiderably, or diſappear: but in the worſt degrees of this diſorder they are greatly aggravated; exceſſive pains in the ſtomach are complained of, after attempts to ſleep; a tremor ſeizes all the limbs, and eſpecially the hands; in child-bed women, the milk is checked and leaves the breaſt, and other evacuations are obſtructed.

The paroxyſms of this fever return like the fits of an intermittent, being violent and more moderate by intervals; in the laſt ſtages of it, delirium, an augmented and almoſt inſupportable difficulty of breathing, and convulſions, accompany all the other ſymptoms, which are proportionably increaſed in violence.

The appearance of the eruption is not fixed to any certain period of the diſeaſe; in ſome caſes it is ſo early as the fourth, and in others even later than the eleventh or twelfth days, but the urgency of the ſymptoms generally foretels it's approach.

Immediately preceding the coming out of the puſtules, an itching, tingling, or pricking, is generally felt in the ſkin, and the profuſe ſweat with which this ſenſation is commonly accompanied, produces a ſourish and diſagreeable ſmell; theſe puſtules in moſt caſes are only found on the neck, breaſt, and between the fingers, though in others they are ſpread over the whole body; they continue on the ſkin till they are increaſed to their full ſize, and then diſappear gradually, leaving the external ſkin ſomewhat rough on the parts where they were moſt abundant: of theſe puſtules, the red are leſs dangerous than the white.

In the beginning of this diſeaſe, heating medicines, or a warm regimen, will be attended with danger, if they do not produce perſpiration, which is leſs often effected by theſe means than by diluting. The favourable appearances are, a pain in any particular part in the early ſtages of the diſorder; heat without much ſenſe of pain; heats and colds returning alternately; a deficiency of ſpirits; a weight on the breaſt; difficult breathing, accompanied with frequent ſighs; and the abatement of theſe complaints on the appearance of the puſtules, with a gentle continued perſpiration; much inclination to ſleep is alſo flattering. Delirium, and even convulſions, before the eruption, are not always attended with great danger; but in the progreſs or declenſion of the diſeaſe, theſe violent ſymptoms are alarming: if a diarrhœa comes on, and either ſtops ſpontaneouſly of a ſudden, or is checked by medicine, an apoplexy may be apprehended. A change of the urine from a yellow to a pale colour at once, threatens danger; and it may alſo be feared when the puſtules appear and vaniſh at different times.

In the decline of this diſeaſe, the wriſts and upper ſurfaces of the hands are often cold, moiſt, and clammy; and upon the abatement of the eruption, the legs, thighs, and feet ſwell, a tumour or abſceſs forms on the breaſt, the memory fails, and an immoderate quantity of urine is diſcharged: if the patient is a woman in child-bed, the diſcharges are exceſſive; loſs of appetite, weakneſs, heat of the internal parts, and hyſteric appearances ſucceed, and when theſe ſymptoms happen, a fatal hectic does not unfrequently follow.

In all eruptive diſeaſes, the great object is to keep up ſuch a degree of heat as to prevent the puſtules from being checked or driven back, and to promote their arriving to maturity, but at the ſame time not to increaſe it ſo much as to force out a large quantity.

The chamber of the ſick therefore ſhould be kept to that degree of warmth only, which the patient finds perfectly agreeable; for this purpoſe freſh air may be admitted with care, but not in ſuch a quantity as to excite any diſagreeable ſenſations; the bed ſhould not be covered with more cloaths than uſual in health, and no ideas of danger ſhould be thrown out to diſturb or alarm the patient's mind: any agitation of the ſpirits tends to retard the appearance, or check the progreſs of the eruption, either of which will be productive of very dangerous conſequences.

The diet may be panada, gruel, ſago, and weak broths; ſmall quantities of wine and ſugar may be added to the former; but this muſt be regulated by the ſymptoms, and omitted if they are very inflammatory. Fruits, roaſted apples, and the cooling and cleanſing food allowed in other fevers, may be uſed in this.

The drink muſt alſo be ſuited to the ſymptoms, and to the patient's ſtrength and degree of ſpirits; if neither fail, the herb teas, Seltzer water, or the following decoction may be uſed.

Take one ounce of ſarſaparilla—one ounce of hartſhorn ſhavings. Boil them twenty minutes in one quart of water; ſtrain it off, and ſweeten with ſugar or honey.

If the patient ſhould be weak or low, and his ſpirits ſink, his drink muſt be of a more generous nature, ſuch as wine whey, or negus, acidulated with orange or lemon-juice: the quantity of wine muſt be determined by the circumſtances.

Bleeding is rarely either neceſſary or admiſſible in this diſeaſe, as the feveriſh ſymptoms ſeldom run high, but it muſt in no caſe be performed after the appearance of the puſtules; and ſhould ſuch ſymptoms attend as to render it adviſable, it ſhould even then be done with great deliberation. The following draughts may alſo be neceſſary.

Syrup of lemon, one ounce—ſalt of hartſhorn, a ſcruple—antimonial wine, from forty to fifty drops—pure water, two ounces—balſamic ſyrup, half an ounce.—Of this quantity make two draughts; give them at the diſtance of four or five hours, and repeat as needful.

Bliſters are particularly recommended in this diſeaſe, and where the eruption diſappears and returns, are peculiarly neceſſary; but they ſhould neither be large, nor ſeveral at a time; they are beſt applied to ſucceed each other, ſo as to keep up a continual ſtimulation. If, however, the puſtules ſhould totally diſappear, and this ſymptom be attended with conſiderable pain in the head, delirium, or a lethargic diſpoſition, a larger bliſter ſhould be applied between the ſhoulders, and others to the arms, inſides of the legs, and thighs.

Though this diſeaſe is ſometimes brought on, and eſpecially to women in child-bed, by too great a degree of heat in the regimen, and even medicine; by giving too plentifully of wine, ſpices, and other cordials; and by excluding the air, and loading on an enormous weight of bed-cloaths: yet the cure of it muſt not be attempted by an immediate alteration to the oppoſite extreme; the change muſt be made by degrees, or we ſhall incur dangers at leaſt equal to thoſe we ſeek to avoid.

Nor can we in this diſeaſe adviſe extraordinary evacuations, either of purging or ſweating; the former tends to waſte the patient's ſtrength, and lower his ſpirits; the latter to throw out an unneceſſary quantity of eruption, and delay the progreſs of the diſtemper: in this, as well as moſt other diſorders, the efforts of nature ſhould be attentively watched, and moderately promoted; a very coſtive diſpoſition may be relieved by emollient clyſters, and a gentle perſpiration aided by diluting liquors; and, in the ordinary progreſs of the milliary fever, little farther will be neceſſary.

Yet there are caſes in which, on the failure of a kindly progreſs in the eruption, or of the patient's ſpirits, cordials may be abſolutely neceſſary; the beſt, however, which can be recommended, will be wine added in a ſomewhat larger proportion to the food or liquors, and this may alſo be better adapted to the neceſſities of the caſe than any medical preſcriptions we can offer: the latter muſt be directed and adminiſtered by ſome certain rule, but the quantity of the former may be varied according as the occaſions preſent themſelves.

The milliary fever is ſometimes obſerved to combine with it ſymptoms of a putrid nature; and inſtances have occurred, where ſpots and blotches have appeared mixed with the eruptions; whenever this happens, wine and the Peruvian bark are the remedies to be applied to, care being taken to eaſe any complaints in the head, by the uſe of emollient clyſters to keep the body moderately open.

As the progreſs of this diſeaſe is ſlow, ſo is the recovery from it equally tedious, and it frequently leaves behind it ſo conſiderable a degree of weakneſs, as to threaten conſumptions; in theſe caſes change of air is ſo neceſſary, that we have known patients even removed from the country to a town with manifeſt advantage; but this is not the alteration we would adviſe: where conveniency permits, the change ſhould be from a high to a lower, or from a low to an elevated ſituation; avoiding in the one caſe fogs and damps, and in the other a cold, bleak, or ſharp expoſure.

To the article of air ſhould be added, as in moſt other eruptive diſeaſes, moderate purging, always remembering to proportion this evacuation to the progreſs of the patient's recovery; which will alſo be facilitated by gentle exerciſe and nouriſhing food, taken often and in moderate quantities at a time.

CHAP. X.

Of the Bilious or Remitting Fever.

THIS fever is alſo known by ſeveral other names, ſuch as the *remittent fever*, the *marſh fever*, the *camp fever*, and the *autumnal remitting fever*; and takes it's more common additions from a remiſſion of the ſymptoms which generally happens at different periods of the diſeaſe, and from the patient's frequently throwing up a quantity

tity of bilious matter, a redundancy of which is generally aſſigned as the cauſe of this fever.

But *remitting* or *bilious fevers* may be alſo aſcribed to air, ſeaſons, ſituations, and other local as well as accidental circumſtances; for, in this country, it moſtly prevails in hot weather, and in low, marſhy ſituations; and chiefly attacks ſuch perſons, of tender conſtitutions and relaxed habits, as are obliged to expoſe themſelves to the damp air of the night; which being peculiarly the caſe with ſoldiers in the field, it has from thence been denominated the *camp fever*. Corpulent, fat, and flabby perſons, are alſo ſubject to it, as well as the indolent, dirty, and thoſe who are confined from air.

The firſt ſymptoms of this diſeaſe reſemble thoſe of other ardent fevers; weakneſs; wearineſs; weight, pain, and giddineſs of the head; pains in the loins and limbs, ſhiverings, and tremblings: to theſe are added an extraordinary degree of inquietude and anguiſh, burning heats, heart-burns, nauſea, purging or vomiting, or both; and in either of thoſe evacuations, a conſiderable diſcharge of bile. Exceſſive thirſt is alſo a ſymptom of this diſorder; the ſpirits are remarkably dejected, the pulſe ſmall but quick, the countenance has a pale or yellowiſh caſt, the ſkin is generally dry, and the breathing ſomewhat difficult.

Towards the ſeventh, eighth, or ninth day, but very uncertainly as to time, the ſymptoms abate of their violence, and the pulſe returns to very nearly it's natural ſtate; but this remiſſion, which is generally brought on by gentle voluntary perſpiration, ſeldom laſts longer than a few hours, when the fever and all the complaints which accompanied it recur, and frequently with increaſed ſtrength.

As the diſeaſe gains ground, the remiſſions are of ſhorter duration, and the patient derives very little relief from them; but one paroxiſm follows the other cloſely, each ſucceeding one more aggravated than the former: the tongue becomes dry, ſtiff, and even chopped; the mouth and teeth are covered with a dark cruſt or coat, of a colour almoſt approaching to black; an inflammation takes place in the bowels; the ſtools are diſcharged involuntarily, and are peculiarly offenſive; the pulſe becomes irregular; the whole body is covered with a cold and clammy ſweat; and twitchings of the hands foretel the approach of convulſions, the laſt fatal ſymptom.

The only method of avoiding this fever, is to pay a conſiderable degree of attention to the ſeveral articles of air, exerciſe, and diet; and the uſe of the bark as a preventive medicine, in camps and other ſituations in which an expoſure to the damps and chills of night-air are unavoidable, would certainly be productive of very happy conſequences.

In this diſeaſe the regimen muſt in a great meaſure depend on the ſymptoms, which differ conſiderably, not only in different patients, but in the ſame patients in different attacks. If much inflammation is apprehended, it will be right to dilute and to regulate the diet accordingly: when the ſtate of the pulſe and the patient's ſpirits denote a nervous or putrid diſpoſition, both the food and liquors muſt be proportionally more nouriſhing and cordial; but as this diſeaſe is unqueſtionably of the ardent kind, the uſe of heating liquors or medicines may be attended with the danger of converting it into an acute or burning fever, inſtead of an intermittent, which laſt is the change we ſhould always endeavour to effect.

But, which ever of the ſymptoms predominate, the directions we have given in treating of other fevers, will for the moſt part be applicable to this; nor ſhould we neglect to admit freſh air into the bed-chamber of the ſick; to purify it with the ſteams of hot acids, and by ſprinkling it with cold; to fumigate with myrrh, lavender flowers, and other aromatics; to change the linen both of the bed and the body; to remove the foul linen as well as the evacuations, without ſuffering either to remain in the room a moment; and to ſupply the patient with ſome refreſhing fruit or eſſence to apply to his noſe, whenever he complains either of giddineſs, faintneſs, or diſagreeable ſmells.

If the pulſe ſhould be hard or full at the beginning of this diſeaſe, bleeding may be neceſſary; and if the ſigns of inflammation are evident, it may be very proper to begin the cure by this evacuation, which may probably produce the deſired effect of bringing it to intermit: but ſhould the ſymptoms be at all nervous, or indicate putridity, bleeding ſhould undoubtedly be omitted.

But a gentle emetic will in no caſe be prejudicial; and for this purpoſe, from one to two grains of emetic tartar, or from fifteen to twenty-five grains of ipecacuanha will be found ſufficient, and either may be worked off with a moderate quantity of camomile tea.

Coſtiveneſs muſt be prevented by gentle clyſters, or very mild opening medicines, ſuch as manna, ſenna, the pulp of tamarinds, or the like; ſome recommend the following powder.

> Tartar emetic, one grain—contrayerva root powdered, five grains, mixed.

To be repeated every two hours till it occaſions vomiting, purging, and ſweating.

But the *Columbo root* hath by others been ſaid to produce the moſt ſpeedy and beneficial effects; and, when mingled with the neutral ſalts, ſupports the patient's ſtrength, and obviates the nauſea and ſickneſs; whilſt the ſalts abate the feveriſh heat, allay the thirſt, and bring on a gentle, ſalutary diarrhœa: and this medicine is by ſome preferred in this diſeaſe to the Peruvian bark, and may certainly be tried, when that medicine fails of ſucceſs, which ſometimes happens, even though the remiſſions are extremely evident, and the returns marked with ſhiverings and other intermitting ſymptoms; in ſuch caſes the Columbo root will frequently anſwer our wiſhes by correcting the bile, and reſtoring the tones of the ſtomach and of the whole habit; and it is alſo ſaid to be excellent in preventing relapſes, which in this fever are frequent, and often more dangerous than the original diſeaſe.

The following form of adminiſtering the Columbo root hath been adviſed.

> Take of the Columbo root powdered, ſixteen grains—of tartar vitriolat. or vitriolated tartar, twenty-five grains. Mix them well together.

And repeat this doſe every four, five, or ſix hours, according to circumſtances.

But whatever ſucceſs may have attended the uſe of the Columbo root, we are not inclined to prefer it to the Peruvian bark, which we would recommend to be taken immediately after the firſt remiſſion hath aſcertained the nature of the diſorder, and after the neceſſary evacuations of bleeding, (if requiſite) vomiting, and ſtools.

If the bark can be taken in ſubſtance, it is certainly the moſt efficacious method of adminiſtering it, and in this caſe an ounce of the powder may be divided into twelve doſes, and one taken every third, fourth, fifth, or ſixth hour, as the patient's ſtomach will bear it, either in water or Port wine and water, according to the ſtate of the fever.

But where the bark in ſubſtance is diſagreeable, the following forms may anſwer the purpoſe: the firſt, in caſe no ſymptoms of inflammation remain; the laſt, if ſuch ſymptoms ſtill continue.

> Infuſe one ounce of Peruvian bark, powdered, in a pint of Rheniſh wine. Let it ſtand

twelve hours, then pour it off fine, and give three or four ſpoonfuls every hour.

Of the decoction of the bark, one ounce and half—of ſimple ſyrup, two drams. To be repeated every hour, or every ſecond hour.

Either of theſe may be acidulated to the palate with elixir of vitriol; and if the bark ſhould occaſion vomiting or purging, a few drops of the Thebaic tincture, or liquid laudanum, may be added to each doſe.

Though this courſe, as we have before remarked, is not always ſucceſsful, yet the contrary ſo ſeldom happens, that we may venture to pronounce the bark a ſpecific as well in remitting as in intermitting fevers; in which, indeed, the former generally terminate.

CHAP. XI.

Of the Scarlet Fever.

THIS diſorder takes it's name from a florid efflorescence which appears on the whole ſurface of the body, and is commonly of a ſcarlet colour, or rather purple, inclining to that of Port wine or claret.

The ordinary ſymptoms of this diſeaſe reſemble thoſe of other fevers; languor, reſtleſſneſs, pains in the head and limbs, and alternate fits of ſhivering and heat, ſo that it is difficult to fix the nature of the fever till the appearance of the ſpots, which generally takes place about the third day, at firſt ſcattered over the different parts of the body, but ſoon ſpreading ſo as in many caſes to unite, and nearly cover the whole ſkin: theſe ſpots are accompanied with an itching, heat, and dryneſs, and after having continued two or three days, diſappear; after which the outward or ſcarf ſkin peels off, leaving the body covered with a roughneſs or ſcale like bran.

In this ſtate of the diſeaſe, unaccompanied with ſymptoms of violence, the aſſiſtance of medicine is rarely required: confinement within doors, abſtinence from fleſh and ſtrong drinks, and the free uſe of diluting liquors; keeping the body open by emollient clyſters, or ſmall doſes of cooling laxatives, ſuch as nitre, rhubarb, manna, or the like; will in moſt inſtances remove this diſorder, or conduct the patient through it, without his ſuffering much inconvenience.

But this fever ſometimes aſſumes a malignant and putrid appearance, and it's attacks then commence with more violence; and, added to the common ſymptoms, violent pains in the head, ſickneſs at the ſtomach, and uncommon oppreſſion of the ſpirits, are ſucceeded by great heat, nauſea, vomiting, and ſore throat; a ſmall but quick pulſe; a ſhort and laborious breathing; the tonſils or glands at the entrance of the throat inflamed and ulcerated, and in ſome caſes ſwelled, but not conſiderably; the tongue white and foul, but not dry; nor is the ſkin totally deſtitute of moiſture: in this ſtate the patient continues till about the third day, when the eruption appears, but ſeldom produces any change in his favour; he languiſhes under theſe accumulated complaints till the fifth or ſixth, when a ſuffocation generally puts a period to his miſery.

Of the *ſcarlet fever*, accompanied with theſe alarming ſymptoms, the treatment is difficult, and requires the exerciſe of judgment, diſcretion, and caution; the ſigns of inflammation may be ſo apparent as to call for immediate bleeding, yet that operation, in this diſeaſe, is in moſt caſes attended with danger; and, if abſolutely neceſſary to be performed, ſhould be done by the ſcarificator and cupping glaſſes, but it ſhould in very few inſtances be repeated.

Nor will this diſeaſe bear the promotion of ſtools by antimonials, ſo ſucceſsfully given in moſt other fevers; in this they are apt to bring on a diarrhœa, the continuance of which may be extremely dangerous, and a ſudden check of it no leſs ſo; and though it behoves us to keep open the body by emollient clyſters, if any tendency to coſtiveneſs appears, yet we muſt avoid medicines which may bring on a diſcharge that we may find it difficult and perilous to ſtop.

When the ſcarlet fever aſſumes a putrid and malignant appearance, it muſt be treated as a putrid fever; the bark muſt be freely adminiſtered with ſnake-root and other antiputreſcents, and the patient muſt be ſupported with generous and cordial wines, as directed in that caſe; under ſuch circumſtances, evacuations and a cooling regimen will moſt probably be fatal.

In ſome few inſtances, and thoſe principally among young ſubjects, this diſeaſe commences with fits of convulſion or epilepſy, leaving a kind of heavineſs and inſenſibility; when this happens, it will be adviſeable to bathe the extremities in warm water, and to apply a bliſter between the ſhoulders; if the convulſive ſpaſms ſhould be violent, gentle opiates may be neceſſary, ſuch as diacodion, or theriaca Andromachi.

CHAP. XII.

Of the Phrenitis, Phrenzy Fever, or Inflammation of the Brain.

THOUGH, as an original diſeaſe, this fever is *not often* met with in temperate climates, yet as it *ſometimes* occurs in this, and as it requires the ſame treatment when it is ſymptomatic of ſome other diſorder, we ſhall proceed to ſpeak of it among the fevers which though not moſt common, yet occaſionally preſent themſelves in this country.

The cauſes of this diſeaſe are, a too great flow of blood, occaſioned by an increaſed action of the veſſels, and this may ariſe from exceſs in drinking wine or ſpirituous liquors; from violent paſſions of grief, joy, or anger; from expoſing the body, and particularly the head, uncovered to the ſun; by ſleeping under the immediate influence of that planet in hot weather; by intenſe application to ſtudy; by ſuddenly ſtooping, and by that means forcing the blood up to the head; by breaking in too much upon the hours allotted to ſleep; by repelling eruptions in certain diſeaſes; by a ſuppreſſion of evacuations, whether natural or extraordinary; and by an inflammatory diſpoſition at the beginning of a fever.

The ſigns which threaten approaching phrenzy, are intenſe and continued wakefulneſs, or total inability to ſleep; broken, interrupted, and diſturbed ſlumbers, attended with ſtartings and dreams of horror; loſs of memory as to things immediately ſaid or done; a ſharpneſs and vehemence of expreſſion in anſwering queſtions; violent pains in the head; inflammation of the eyes, which become fixed and red, with tears flowing from them involuntarily; the face is violently fluſhed, and the patient is

coſtive;

coſtive; the evacuation of his urine ſuppreſſed in a conſiderable degree; and his ſkin is dry, parched, and ſtretched.

As the diſeaſe itſelf appears, it is accompanied with an acute fever; a pulſe ſo low as to be hardly perceptible; the patient's face blown up and full; if he ſleeps at all his ſleep is of ſhort continuance, and ſo diſturbed that he ſeems in perpetual agitation; drops of blood fall from his noſtrils; and he is ſeized with madneſs, which exhibits itſelf in a variety of ways: at one time the patient weeps in ſilence, and mourns over ſome conceived injury, or laments ſome heavy misfortune; at others he burſts into turbulent and outrageous phrenzy; he is angry without offence, and almoſt inſtantly calm and chearful without any apparent reaſon; he is ſolicitous of the moſt minute trifles, and anxiouſly demands anſwers to the moſt frivolous queſtions; he never continues a minute in the ſame poſture, is perpetually throwing his arms about him, and his head is in unceaſing motion; but he complains of no pains in his head, and his joints, though rather cold, are not affected with any tremor; his urine is diſcharged plentifully, though but little at a time, and is of a yellowiſh colour, watery, thin, and without ſediment; if a head-ach ſhould come on, it is attended by noiſes, ringing in the ears, and a violent throbbing or beating of the arteries, and particularly thoſe in the temples and neck.

The look of patients in this miſerable diſeaſe, is fixed, ſullen, and wild; their eyes are frequently winking, and their minds ſeem to labour under very particular impreſſions; which are, however, in general, occaſioned by very unimportant objects.

Though the tongue is black, and the mouth and lips ſeem dry and parched, yet theſe appearances are unaccompanied with thirſt; on the contrary, drink is frequently refuſed.

The unfavourable ſigns in this diſeaſe are a conſtant ſpitting; green vomiting; repeated ſhiverings; pale, watery, crude urine, and convulſions; and when theſe are attended by a trembling, ſtartings and twitchings of the tendons, want of ſleep, retention of urine, and a gnaſhing or grinding of the teeth, it generally proves fatal.

But if the patient ſhould fall into a free perſpiration; if he ſhould have a copious diſcharge of blood either from his noſtrils, or from the hæmorrhoidal veſſels, (the ſeat of the piles;) if a purging ſhould come on, with pains in the breaſt, or any lower parts of the body; free reſpiration, with a ſtrong cough, and a plentiful diſcharge of urine dropping a conſiderable ſediment; expectations may be formed of a propitious event.

In female patients, nature ſometimes works relief in an exceſs of the periodical diſcharges, added to other favourable ſymptoms.

The great object of our care, in our endeavours to remove this dreadful diſeaſe, is to prevent the immoderate flow of blood into the head, and by that means to leſſen the inflammation of the meninges, or membranes of the brain.

In the management of patients afflicted with this diſorder, it will be neceſſary to guard againſt every thing that may add to the diſturbance of the mind, and the agitation of the ſpirits; no viſitors ſhould be admitted, but a very particular friend who is intimately acquainted with the diſpoſitions and inclinations of the patient when in health; ſuch a companion may ſoothe his anguiſh, and help to calm his perturbation. If the light is offenſive, it ſhould be excluded; but ſhould darkneſs be found to increaſe his ſilent melancholy, the light ſhould be re-admitted; of the two, the paroxiſms of rage are leſs dangerous than gloomy deſpondency.

A variety of experiments have been ſuggeſted to compoſe this phrenzy of the ſoul; artificial falls of water have been created, the efforts of muſic have been tried, the

ruſtling

ruffling of the breeze has been imitated, and invention racked with laudable ingenuity to procure the bleſſing of ſleep, by the production of ſome natural, uniform, and continued ſound.

To every effort of this ſort ſhould be added the moſt unwearied attention to every wiſh of the patient, though expreſſed by the moſt diſtant hints, or betrayed by actions of which we can with difficulty underſtand the tendency.

Above all things, his deſires ſhould be gratified with inſtant aſſiduity, and where the abſurdity of them renders a compliance improper, or the means of obtaining what he requires are not within our reach, promiſes and aſſurances muſt ſupply the want of gratification, and he muſt not be left to entertain a ſhadow of ſuſpicion that his wiſhes will remain unſatisfied; indeed, a moderate indulgence in things not altogether proper may be much more prudent, than to let a patient in this ſituation languiſh after what his appetite ſeems to crave.

The regimen as to food and liquors muſt be nearly the ſame as in ardent or continued fevers, and muſt conſiſt of light ſpoonmeats and fruits, and cool and diluting drinks moderately acidulated; but neither the appetite to eat, or the inclination to ſwallow liquids, will be very conſiderable during the more violent progreſs of this diſeaſe.

As the inflammation requires the moſt ſpeedy abatement, the means to effect it muſt be powerful, and uſed without delay. Bleeding from a large orifice, and as plentifully as the ſtrength of the patient will admit, muſt be the firſt effort; and it has been adviſed to perform the operation as the patient ſtands on his feet, as a more likely way to occaſion fainting, which on this occaſion may produce conſiderable advantages; inſtances not unfrequently occurring, where the patient recovers from this ſuſpenſion of his faculties in a ſtate of comparative compoſure, and enjoys from that period a return and continuance of his reaſon.

If the firſt bleeding is not followed by a change in the patient's favour, it muſt be repeated as it ſhall appear needful; and if the blood can be drawn from the temporal arteries or the jugular veins, the head may probably be more ſpeedily relieved: and ſhould the repetition of this operation with the lancet occaſion a depreſſion of the patient's pulſe as well as his ſpirits, notwithſtanding the delirium may ſtill continue, leeches applied to the temples, not only frequently, but almoſt continually, may anſwer the purpoſe of more copious bleedings. If the fever has been occaſioned in female patients by the obſtruction of their diſcharges, bleeding in the foot may be proper, after a portion of blood has been taken away as already directed.

If nature ſhould indicate an intention to aſſiſt the patient by diſcharges of blood from the noſe, or by the bleeding piles, it ſhould be forwarded and promoted by every means in our power; in the former caſe, the ſteams of warm water will generally encourage the bleeding, and ſome even recommend force by the uſe of ſome ſharp inſtrument; and when the ſtoppage of blood from the piles has occaſioned or augmented the diſorder, the reſtoration of that evacuation muſt be attempted, by applying leeches, warm baths or ſteams, and ſharp clyſters; and if any other evacuations have been ſtopped or obſtructed, either natural, artificial, or accidental, ſuch as the monthly diſcharges, iſſues, bliſters, or ulcers, endeavours ſhould alſo be uſed to reſtore them, or to ſupply the want of them by new drains, as quickly as poſſible.

As ſoon as the patient is bled, he ſhould have a ſmart but cooling purge; and for this purpoſe uſe Glauber's ſalts, or manna diſſolved in an infuſion of tamarinds, to which add nitre or cream of tartar; though caſtor oil is to be preferred as a purge if it can be obtained: emollient and cooling clyſters ſhould alſo be frequently given, perhaps twice in the twenty-four hours will not be too often; but it will be neceſſary to repeat the purging, as well as the bleeding, till ſome abatement of the violent ſymptoms of inflammation.

In the intervals of purging, the emetic, or antimonial wine, ſhould be given every two or three hours, in ſmall doſes, as the patient's ſtomach will retain it; and nitre may be mixed in all his liquids, to the quantity of two or even three drams in twenty-four hours, or his drinks may be rendered acid by Clutton's Febrifuge Spirit. Crude ſal ammoniac is alſo recommended to be uſed inſtead of nitre, though we think the latter preferable.

The head being cloſely ſhaved, cloths dipped in ſtrong warm vinegar, or vinegar and roſe water, may be laid over it, and repeated as often as they become dry; or the following embrocation may be made uſe of, with which the upper part of the head may be frequently rubbed, after which it ſhould be immediately covered with warm linen or woollen cloths.

Take equal quantities of diſtilled vinegar—of camphorated ſpirits of wine—and of ſpirit of ſal volatile. Mix for an embrocation.

The legs ſhould be bathed at leaſt twice a day in warm water, and if the whole body can be conveniently bathed, it will be of great advantage: ſpaſms, which are uſual in this diſeaſe, when it is occaſioned by obſtructions of female diſcharges or the piles, will be conſiderably abated by general bathing.

If the diſeaſe ſhould refuſe to yield to theſe ſeveral attacks, it will be adviſeable to cover the whole upper part of the head with a bliſter; though ſinapiſms of ſtimulating poultices to the ſoles of the feet may be firſt tried.

If the patient ſhould happily eſcape the fatal effects of this diſeaſe, yet his recovery is in general ſlow; and every precaution, with reſpect to the management and treatment of body and mind, ſhould be extended a conſiderable time beyond the diſappearance of the delirium: the mind ſo lately ruffled is apt to fall back upon the ſlighteſt provocation or contradiction, and Reaſon, when ſhe has but newly re-aſſumed her ſeat, is ſubject to be perverted upon very ſlight and inſignificant occaſions.

As ſoon as a ſufficient degree of ſtrength returns, it is adviſeable, when circumſtances permit, to take the patient a journey: change of air, variety of objects, and diverſity of ſituations, will help to diſpel an oppreſſion and air of melancholy, which are frequently the relicks of this diſeaſe, and whilſt they contribute to calm the mind, afford no ſmall aſſiſtance in the recovery of the body.

It may be neceſſary alſo to caution the friends of thoſe who have paſſed this diſorder, never to remind them of the circumſtances which have attended it; nor even to ſpeak of it in any other manner than as of an ordinary fit of ſickneſs: we have known inſtances, where indiſcretions in this particular have thrown the patients back into the ſame miſerable malady; from which, if they have a ſecond time eſcaped with life, they have been condemned to ſpend the remainder of it in idiotic ſtupidity, or actual madneſs.

CHAP.

CHAP. XIII.

Of the Eryſipelas, Eryſipelatous Fever, or St. Anthony's Fire.

THIS diſeaſe has alſo a variety of provincial names or denominations; in ſome parts of the kingdom it is called the *roſe*, and in others the *girdle* or the *ſhingles*: the true ſpecies is an acute and inflammatory fever; but there is alſo a baſtard kind, which is more tedious than acute.

Perſons of both ſexes, and of all ages, habits, and conſtitutions, are liable to the attacks of this diſorder; but thoſe of full and ſanguine habits of body, young people of florid complexions, and pregnant women, are more peculiarly ſubject to it; and it generally prevails in the autumn, when hot weather is immediately ſucceeded by cold; a continuance of rain, and a damp, moiſt, and foggy air: and thoſe who have once ſuffered in this diſeaſe are extremely liable to returns of it.

The cauſes may either proceed from circumſtances which affect the body, or thoſe which act upon the mind: of the former, ſudden changes from the extreme of heat to cold, and the contrary; ſleeping on the ground, or in damp rooms; exceſſive drinking, violent exerciſe, or whatever occaſions great perſpiration, or ſuddenly checks it; obſtructions of any evacuations, natural or artificial; or the impeding or ſtopping any accuſtomed drains or diſcharges.

Of the latter, violent paſſions of anger, grief, or joy; ſudden impreſſions of fear; and whatever tends to flutter and agitate the ſpirits, and may quicken the circulation of the blood.

It has been alſo obſerved, that a glutinous humour is ſupplied by thoſe glands which are ſeated immediately under the ſkin, in that membrane which is called the cellular, which preſerves the ſenſibility of the ſkin, and keeps it moiſt, by checking a proportion of the fluid which paſſes off through it's pores: this glutinous humour being wanting in an eryſipelas, the ſkin is dry and parched, becauſe the irritation of the veſſels is but ſmall, and the diſeaſed humours having nothing in their way to prevent their paſſage, exhale through the veſſels of the ſkin; and it is by the want of this glutinous humour, that an eryſipelas differs from any other inflammation, either of the blood, or which appears externally.

The following ſeems to be an accurate deſcription of the ſymptoms of this diſeaſe. It is ſometimes merely a ſlight indiſpoſition, which appears on the ſkin, hardly accompanied with a complaint, and it moſt commonly breaks out on one leg or thigh, or in the face; the ſkin become red, rough, and hard, but on the preſſure of a finger the redneſs diſappears, and returns again almoſt immediately after it's being removed; a burning heat is felt in the affected parts, making the patient rather uneaſy than ill, but in ſome inſtances preventing his ſleeping. This diſorder continues to increaſe during two or three days, remains at it's height ſeldom longer than eight and forty hours, and then gradually abates, and entirely goes off about the third day after the change, or the eighth from the attack, leaving, however, a ſcalineſs on that part of the ſkin which was the ſeat of the diſorder; and this, too, generally falls off in a day or two.

But when the malady is more ſeverely felt, it begins with violent ſhiverings, which are ſucceeded by extreme heats, exceſſive head-ach, languor or faintneſs at the heart, ſickneſs at the ſtomach, and reaching to vomit; and theſe ſymptoms continue till the eruption or external inflammation appears, and then abate, though ſome degree of the fever, and the ſickneſs, or a loathing, frequently remain the whole time the diſeaſe is advancing: and when the eruption and inflammation happen in the face, the pains in the head continue even till the decline of the diſeaſe, accompanied with ſuch a ſwelling of the eye-lids, as in ſome inſtances to cloſe the eyes, and the patient hath few or no intervals of eaſe.

This diſorder ſometimes paſſes from one cheek to the other, and extends itſelf by degrees over the forehead, neck, and even between the ſhoulders; and under theſe circumſtances the duration of the diſeaſe is conſiderably lengthened; and in certain inſtances it runs ſo high as to occaſion a violent fever, to obſtruct and oppreſs the brain by the ardency of the circulation, and to produce delirium, ravings, and extreme danger.

If the eruption of the eryſipelas appears in the neck, it brings on a quinſey, with very aggravated ſymptoms, and not unfrequently proves fatal; when it attacks the leg or thigh, the whole of it ſwells, and the heat and irritation extends over the limb. Whenever the inflammation is conſiderable, the part it ſeizes is covered with puſtules, filled with a watery clear humour, reſembling the bladders which ariſe after a burn, and theſe puſtules dry up and fall off: in ſome caſes, when the face is affected by this diſtemper, the humour which iſſues out of theſe puſtules is thick and glutinous, and forms a ſcurf or ſcab, in appearance like that which covers the bodies of new-born infants; and this continues on the face many days before it ſcales away.

In very violent attacks of this diſeaſe, it continues from eight to ten, or even twelve days, at the ſame height, and terminates at laſt in a profuſe ſweat; which is frequently preceded for a few hours by reſtleſſneſs, ſhiverings, and anxiety: during the progreſs of the diſtemper, the whole ſkin is dry, and the inſide of the mouth.

Though the ſwelling of the eryſipelas ſometimes forms a tumor, yet it ſeldom ſuppurates, or comes to matter: if ſuch a tendency appears, it may be neceſſary to promote it by poultices and fomentations; but it is, in moſt caſes, right to avoid ripening theſe tumors if poſſible, as they ſeldom heal well, and are very apt to degenerate into continued ulcers.

A malignant kind of eryſipelas is ſometimes epidemical, and then frequently terminates in a gangrene; it alſo very often ſhifts it's ſituation, or totally diſappears of a ſudden: in the latter caſe, the patient immediately becomes uneaſy and diſordered, is hot, reſtleſs, and feels a propenſity to vomit; but if the eryſipelas appears again, though on a different part of his body, he finds himſelf relieved from thoſe diſagreeable ſymptoms.

But if, inſtead of returning again to the ſurface of the ſkin, the humour falls upon the brain or the breaſt, the diſeaſe is generally fatal: in the former caſe the patient becomes immediately delirious; his countenance is fluſhed; his eyes are wild and ſparkling; and he ſoon grows frantic, and by degrees ſinks into a coma or lethargy, which carries him off. If the lungs are attacked by this diſorder, it is attended with intenſe heat, and inexpreſſible anxiety and oppreſſion: and when it ſeizes the breaſts, particularly of women in childbirth, or who give ſuck, it is extremely hard and painful, and much inclined to ſuppurate; the breathing is difficult; and in theſe caſes, it is frequently accompanied with violent pain in the axilla, or arm-pit, of the ſide diſordered; in which part an abſceſs is ſometimes formed.

When this diſeaſe approaches ſuddenly, without much previous indiſpoſition; when the perſon attacked by it has a good habit of body; and when neither the nerves, membranes, or vital parts are affected;

when the ſwelling ſpeedily ſubſides, the feveriſh ſymptoms go off or abate, the ſkin turns brown or yellow, and the ſcurf or ſcale becomes looſe and begins to fall off; little danger is to be apprehended: nay, in ſome inſtances, the approach of the eryſipelas hath relieved other diſorders, ſuch as the cholic, aſthma, and the like.

When the diſeaſe is deeply ſeated, and is fixed on a ſenſible part of the body, it is attended with very conſiderable danger; and more eſpecially if it meets a bad habit of body: if any of the violent ſymptoms which we have deſcribed preſent themſelves, or if the eruption aſſumes a livid appearance, or becomes black, and the ſwelling at the ſame time decreaſes, little hope can be entertained of the patient's recovery; nor does he often ſurvive the ſeventh or eight day from the attack.

Nor are all the diſagreeable conſequences of this fever removed with the diſeaſe itſelf; it ſometimes leaves behind it ſwellings in the feet and ancles, which are not reduced without great difficulty; and thoſe who are ſubject to frequent returns of this diſtemper, generally die of it at laſt.

In the management of this diſeaſe, great diſcretion is neceſſary to regulate the degree of warmth and cold; too much of either will tend to throw back the eruption, which muſt be carefully avoided.

The diet ſhould be thin, and ſuch as inclines to promote gentle perſpiration: roaſted apples, biſcuits, raiſins, and the like, may ſerve for ſolid food; the ſpoon meats may be panada, gruel, barley broth, and where the fever does not run high, thin chicken broth; the drinks, herb teas, elder flower tea, barley water, or if the patient's pulſe or ſpirits ſhould ſink, wine whey or negus; and in that caſe he may alſo be allowed ſago and jellies, with a little wine. If the fever is at all violent, the drinks ſhould be acidulated with Clutton's Febrifuge Spirit, or other acids.

In ſlight caſes, exciting perſpiration by diluting liquors, and confining the patient within doors, will in general carry off the diſeaſe, without the interpoſition of medicine, or other evacuations.

But if the attack threatens to be violent, if the pulſe is ſtrong, hard, and quick, bleeding may be neceſſary; but caution is required in the performance of this operation; and it muſt be repeated as the fever and ſtrength of the patient direct. If he has had frequent returns of the diſorder, and his manner of living has been free, a repetition of the bleedings may probably be abſolutely neceſſary; they will unqueſtionably be ſo, if the diſeaſe affects his head.

If the ſuperior parts, ſuch as the breaſt, lungs, head, or brain, are the ſeats of complaint, bathing the extremities in warm water will be of ſingular uſe; nor will it in ſuch caſes be improper to apply poultices or ſinapiſms to the ſoles of the feet.

In all caſes the bowels ſhould be kept in a lax ſtate, by giving whey of cream of tartar, tamarinds, or other opening acids; but if the head ſhould be affected, purging is the only ſpecific, and ſtools muſt be procured either with nitre and rhubarb, in the following proportions; or, if this ſhould prove ineffectual, with clyſters, or purgatives of a more powerful nature.

> Take of nitre, one dram—rhubarb, ſix grains. Divide into two doſes, and give the ſecond, if the firſt ſhould not ſucceed in producing ſtools.

If by any expoſure to cold air, or other accidental circumſtance, the eryſipelatous matter ſhould be repelled or ſtruck inward, bleeding will be immediately neceſſary, (unleſs the ſtate of the pulſe ſhould abſolutely forbid this operation) and ſhould be ſucceeded by bliſters, as well on the part which the eruption hath left, as on the ſides of the neck; and it will in that caſe be right to bathe the feet and legs in warm water, and to apply ſinapiſms or warm poultices to the ſoles of the feet.

Should ſuch a diſappearance of the eruption occaſion faintings, a drooping pulſe, and depreſſion of ſpirits, cordials of wine diluted according to the circumſtances, and medicines calculated to augment the perſpiration, ſhould accompany the bliſters.

When bliſters are requiſite in this diſorder, the following compoſition is recommended.

> Take equal parts of common bliſtering plaſter and the ſtomach plaſter; add from one to two drams of camphire diſſolved in ſpirit of wine. Mix them well together.

Spread this compoſition on leather, and then warm the plaſter moderately by the fire, and lay over the ſurface of it a piece of fine ſoft muſlin, ſo as to be next the ſkin on application. Bliſters thus prepared will occaſion much leſs irritation than the uſual ones, will produce no ſtrangury, or but a very ſlight degree of it; and when the removal is neceſſary, will ſeparate from the ſkin with much greater facility, nor will this covering at all prevent the bliſter from riſing.

The common bliſtering plaſter is prepared as follows.

> Take of drawing plaſter, half a pound—of cantharides or Spaniſh flies, four ounces—of vinegar, half a jill. Melt the plaſter, and before it begins to harden, ſprinkle in the cantharides, being very finely powdered; then add the vinegar, and beat the whole well together.

The ſtomach plaſter is compoſed—

> Of ſoft labdanum, three ounces—of frankincenſe, one ounce—of cinnamon, and expreſſed oil of mace, of each half an ounce—of eſſential oil of mint, one dram. Firſt melt the frankincenſe, then add the labdanum heated till it becomes ſoft, and then the oil of mace; afterwards mix in the cinnamon with the oil of mint, and beat the whole together into a maſs in a warm mortar, and keep it in a cloſe veſſel.

In the wandering kinds of this diſorder, that is to ſay, when the eruption and inflammation ſhift from place to place, give half an ounce of the rob of elder three or four times a day, with five or ſix grains of the ſal polychreſtum in each doſe; every third day give a cooling purge of manna, or Glauber's ſalts, diſſolved in an infuſion of ſenna; bathe the extremities every evening in warm water, and then apply ſinapiſms or warm poultices to the ſoles of the feet.

From the peculiar difference of the ſkins of different perſons, and from the nature of the diſeaſe itſelf, external remedies ſhould be applied with extreme caution. In the beginning of the diſeaſe, the part may be kept from the air by ſoft flannels or other light woollen cloths; when the external ſkin is raiſed in bliſters, and the humour begins to paſs off, ſuch applications are proper as will abſorb the matter, and fine linen rags, on which finely powdered chalk or flour has been well ſprinkled or duſted, will anſwer this purpoſe, or flannels dipped in a decoction of elder and camomile flowers, and wrung dry, may be applied to the inflamed parts, and renewed as often as they grow cool.

Goulard's Saturnine Water hath alſo been recommended as a ſafe application, where a reſolution of the inflammation is attempted; but we apprehend great care ſhould be taken not to uſe it till the eruptions are compleatly filled, and the humour or matter is diſpoſed to paſs off voluntarily.

If a gangrene or mortification is threatened by the appearance of livid, black, or blue ſpots, about the eruptions; the bark, camphire, and acids, ſhould be freely adminiſtered, as preſcribed in putrid and malignant caſes: nor are ſmall quantities to be depended on; an ounce or more of the powder, and proportionably in other forms, ſhould be taken in the twenty-four hours; and ſpirituous and ſtrengthening applications ſhould be uſed externally, ſuch as cloths dipped in lime water mixed with camphorated ſpirit of wine, or the camphorated ſpirit with the tincture of myrrh, or a ſtrong decoction of the bark; ſome adviſe poultices compoſed of bread or flour and the powder of the bark, and wetted with the hot decoction of that medicine, to be applied to the part affected, and renewed frequently.

Applications of ointments, ſalves, oils, and plaſters of a greaſy nature, ſhould by no means be ſuffered; they tend to repel or obſtruct the paſſage of the watery humour which is required to be carried off; and which it ſhould be our care to promote and not to retard.

There is alſo another diſorder, which, from a ſimilarity of external appearance, hath been denominated the *ſcorbutic eryſipelas*; but as we are ſatisfied that this is actually a ſcorbutic and not an inflammatory eruption, the treatment of it will be found under the head of *ſcurvy*.

To eſcape the eryſipelas, the ſame precautions are neceſſary as we have recommended for the prevention of other inflammatory diſorders; thoſe who are ſubject to frequent returns of it, will do well to remark if it is apt to follow any particular indulgence or exceſs, either of food, liquors, or the paſſions, and from hence they will be enabled to gather the beſt regulations for avoiding this troubleſome and ultimately dangerous diſeaſe. General rules apply to almoſt all diſtempers, but not to all conſtitutions or habits of body; air, exerciſe, mediocrity of heat, light and cooling food, ſmall and diluting liquors, and bowels kept open if neceſſary by gentle laxatives, will in general prepare the body to reſiſt the attacks of this, as well as moſt other maladies.

CHAP. XIV.

Of the Quinſey, or Inflammation of the Throat.

THIS diſeaſe is an inflammation of thoſe parts of the throat which ſerve the purpoſes of breathing, ſpeaking, and ſwallowing; it is by ſome called a *ſtrangulation of the fauces*, or *paſſages into the gullet*; it is an acute and inflammatory diſorder, attended with a fever: when it is epidemic and infectious, it generally prevails in the latter end of the ſpring, or early in the ſummer, and moſt commonly after a long continuance of rainy or damp weather; and the young, the ſanguine, and thoſe whoſe blood is of an inflammatory diſpoſition, are moſt liable to it.

The cauſes are in general ſuch as excite other inflammatory diſorders, and in particular obſtructed perſpiration, the effect of which is ſo ſuddenly and violently felt in the throat, that the omiſſion of cloathing that part of the body as warm as uſual, ſitting with the neck againſt a window, going out of a warm room into the cold air, or even drinking a draught of cold liquor when the body is heated by exerciſe, will frequently occaſion inflammations of the throat or quinſeys; other matters tending to inflame the blood, ſuch as neglecting accuſtomed evacuations, may alſo produce the ſame effect.

Violent exertions of the voice in ſinging, ſpeaking in public, huzzaing, cheering the hounds in hunting, and the like, may occaſion this diſeaſe; orators or ſpeakers in public aſſemblies and courts of law are peculiarly liable to it, and ſo are actors and ſingers on the ſtage.

It may alſo be brought on by damps and chills of all kinds; expoſure to the night or morning air; damp ſheets, beds, or linen; newly built, plaſtered, or painted houſes; rooms newly waſhed; wet feet; wet cloaths; and, in ſhort, by whatever tends to leſſen or check perſpiration.

Sore-throats or quinſeys may alſo ariſe from accidental injuries received by ſwallowing fiſh bones, ſplinters, pins, or other ſolid and ſharp ſubſtances, which may either ſtick in the throat, or lacerate it in their paſſage through it.

The ſymptoms of this diſeaſe are, at firſt, pains without any apparent cauſe, a ſtiffneſs or difficulty of moving the neck and throat; a conſiderable diſcharge of ſaliva (or that matter which is expreſſed from the glands of the throat, and ſerves to moiſten that part as well as the tongue and mouth) without any viſible tumor, a dull pain and ſenſible roughneſs in the firſt paſſages to the gullet, and a difficulty of ſwallowing the fluid which uſually gathers in the mouth; and theſe are followed by an impediment in breathing, like the clogging of ſome groſs humour. As the diſeaſe increaſes, the part grows red, the tumor becomes manifeſt, and at length the fauces or paſſages into the gullet, the uvula or valve, which dividing the noſtrils and throat enables us to breathe through either, and the upper part of the throat, are ſwelled to a remarkable degree, occaſioning a difficulty of ſwallowing and a ſtrangulation or choaking, proportioned to the tumor; a ſuppreſſion of the breath, and a continual nauſea; and, if the tongue be preſſed with the finger, a dry tenſion or ſtiffneſs is perceivable. When this diſorder is in it's aggravated ſtate, the tumor or ſwelling ſpreads over the neck and face; the mouth overflows with ſpittle or ſaliva, and a thick, tough, and glue-like humour; the eyes are blood-ſhot, and appear ſtarting out of the head; and the veins are full and diſtended. In the farther progreſs of the diſeaſe, the tongue ſwells, and is forced as it were over the teeth; the paſſages from the throat are dry, the joints are cold and benumbed, the pulſe is quick; the patient complains of extreme difficulty in lying on the back or ſide, and expreſſes an earneſt deſire to ſit up; and his ſpeech is painful, confuſed, and inarticulate: as the diſorder draws nearer to a fatal period, every ſymptom increaſes in violence; the patient's face becomes livid; he loſes the powers of ſpeech; there is a rattling in his throat and breaſt; whatever liquid he attempts to ſwallow flies out at his noſtrils; the pulſe fails; in ſome inſtances he howls like a dog, in others foams at the mouth; and death ſpeedily enſues to relieve him from agonies no longer ſopportable.

If there is no apparent tumor, the neck is particularly ſlender, erect, and immoveable, ſo that the patient can neither incline or turn his head; the eyes are hollow, the face wan and ſunk, the forehead ſtretched, the colour livid, breathing extremely difficult, the patient's ſtrength ſuddenly fails, his intellects and ſpirits become dull, and he dies under a ſpeedy and acute ſuffocation.

Such are the ſymptoms of the quinſey, diſtinguiſhed from all other complaints of the throat, by being invariably attended with fever, ſuppreſſion of the breath, and difficulty of ſwallowing.

To avoid this diſeaſe, we muſt ſhun exceſs of every kind, agitation of the body, contrarieties of air, food, and liquors; irregularities in living, and impetuoſity of the paſſions, which may tend to inflame the blood. We muſt be careful in the leſſer articles, which either contribute to health or occaſion ſickneſs; and we muſt on no occaſion forget, that whatever checks, impedes, or leſſens the natural evacuations, and in particular perſpiration, will moſt probably occaſion a diſorder, which, though generally diſregarded at firſt, will become troubleſome, dangerous, and even fatal.

The danger of this diſeaſe is generally eſtimated by the degree of fever, and difficulty of breathing; and a ſudden removal of the inflammation from the external parts frequently occaſions convulſions, delirium, and a peripneumony, or inflammation of the lungs, too often mortal; frothing at the mouth, conſiderable ſwelling of the neck, and the formation of an abſceſs in the throat, are alſo dangerous ſymptoms; and if the tongue becomes of a duſky red colour, if the extremities grow cold, if the breaſt ſeems contracted and oppreſſed, and the pulſe is hard and intermitting, or if a gangrene or mortification ſhould come on, the caſe will then be deſperate: much thick and tough ſaliva is a bad ſign in the beginning of the diſorder, and great pains in the head and limbs are alſo unfavourable ſymptoms.

But if the troubleſome ſuffocation and difficulty of breathing abate; if the pain and inflammation continue or increaſe externally; if an eryſipelatous eruption appear, and remain on the neck and breaſt; and if in the decline of the diſorder the patient diſcharges a conſiderable quantity of glutinous matter; the diſeaſe will in all probability end favourably.

The diet and liquors in this diſeaſe ſhould be of the ſame kinds as thoſe we have already directed in inflammations of the lungs and pleuriſies; the latter ſhould be acidulated, and drank about the warmth of new milk.

The treatment muſt be nearly the ſame as has been preſcribed for inflammatory fevers; in this caſe, the fever and particular inflammation being reduced, the cure follows of courſe.

Bleeding therefore will be immediately neceſſary; ſome prefer the jugular veins to thoſe of the arm, and others mention bleeding under the tongue; but this is in general attended with conſiderable difficulty: the quantity of the blood drawn muſt depend on the degree of fever; if it runs high, a large portion may be taken away, even till the patient faints; and this operation muſt be repeated, or not, as circumſtances may direct.

The body ſhould be kept open during the whole progreſs of the diſeaſe; if gentle laxatives will not anſwer that purpoſe, the following purge may be given, and repeated daily for the firſt three or four days.

> Take infuſion of ſenna, from two to three ounces—Glauber's ſalts, from half an ounce to one ounce.

If this ſhould not operate ſpeedily, the paſſage of it may be haſtened by a clyſter; and if the fever is high, a dram of nitre ſhould be diſſolved in it: if the throat ſhould be ſo ſwelled as to render it impoſſible to get down theſe purging draughts, clyſters of purgative medicines with nitre ſhould be adminiſtered daily.

For the clyſter—

> In a pint of chicken broth, or oatmeal gruel, diſſolve one dram of nitre, and add from four to eight grains of jalap.

The following gargariſms, (or gargles, as they are more commonly called) are recommended under the different circumſtances.

In the early ſtages of the diſeaſe—

> Take of the pectoral decoction, half a pound—of crude ammoniac ſalt, one dram. Diſſolve the ſalt in the decoction, and ſhake the bottle before it is uſed.

In caſe of great pain and heat, the ſyringe ſhould not be uſed, but the patient ſhould be encouraged to waſh his mouth and throat frequently with hartſhorn-jelly, or the julep of roſes, in either of which may be diſſolved a ſmall quantity of nitre and camphire.

If the throat is dry, and the tongue is ſwelled, and affected with an intenſe burning heat, Take white of egg, beaten or ſtirred to a watery liquor, two ounces—roſe water, and ſyrup of mulberries, of each one ounce—ſal prunella, fifteen grains.

If the quinſey is of the internal kind, and without any apparent ſwelling or tumor, the mouth and throat ſhould be very frequently gargled with milk, in which ſal prunella hath been diſſolved.

When a thin acrid humour falls upon the glands of the palate and throat, uſe the following gargariſm.

Diſſolve one dram of white vitriol in one pint of pure water.

But if only the mouth is dry and parched, the foregoing emollient gargle of the pectoral decoction, and ſal ammoniac, will anſwer the purpoſe.

In quinſeys of an inflammatory nature, acid gargles will be proper after the inflammation is ſomewhat abated, but by no means before, as they are hurtful, by contracting the emunctories or paſſages in the throat for the carrying off the ſaliva and matter, and by thickening thoſe diſcharges. When the diſappearance of the inflammation renders an acid gargle proper, it may be of this form.

Take of tincture of red roſes, two ounces—of ſpirit of vitriol, ten grains.

Some recommend the holding a ſmall piece of ſal prunella in the mouth, ſuffering it to diſſolve on the tongue, and ſwallowing it as it melts; in leſs ſevere attacks of this diſorder, this practice will frequently render gargles unneceſſary; perhaps, in this ſtate of the diſeaſe, ſyrup of black currants mixed with warm water will be found as uſeful a gargle as the foregoing.

If the body is ſufficiently open, or in the intervals between the purges, ſaline draughts with nitre will be extremely proper.

It will alſo be right to attempt leſſening the internal inflammation by external applications; for this purpoſe the volatile liniment is commonly uſed, and flannels dipped in it are uſually wrapped round the throat; the following may probably ſucceed rather better.

Take of olive oil, one ounce—of the volatile ſpirit of ammoniac ſalt, from two drams to four—of camphire, half a dram. Make a liniment, and gently rub the outſide of the throat and neck with it, frequently applying a piece of flannel cloth quite round the neck immediately after this liniment hath been uſed.

If the ſymptoms advance in ſeverity, bliſters muſt be applied between the ſhoulders and behind the ears, and the ſize muſt be governed by the circumſtances; a bliſter acroſs the throat may poſſibly produce more advantageous conſequences than the ſtimulating applications which we have juſt preſcribed.

But if the ſituation of the complaint, or a wiſh to preſerve the ſkin, prevents the application of a bliſter to the part, and the external inflammation is very conſiderable, diſcutient or diſpelling fomentations and poultices may be uſed; for the latter—

Mix barley meal and vinegar to a proper conſiſtence; and add, if at hand, two ounces of the freſh leaves of hemlock bruiſed.

Or the following liniment may ſupply the place of the fomentations and poultice, rubbed on the neck three or four times a day; flannels may be alſo dipped in it, and kept conſtantly about the part.

To half an ounce of camphire, add a ſufficient quantity of ſweet oil to make a liniment.

If the difficulty of ſwallowing is attended alſo with ſuch a ſuppreſſion of breath, as to threaten ſpeedy ſuffocation, before medicine or external applications can procure an abatement of the inflammation, the only poſſible means of ſaving the patient's life, is the performance of bronchotomy, or opening the windpipe; and as it has often proved ſucceſsful, it ought not to be omitted in the deſperate circumſtances we have deſcribed; but as this is an operation of ſurgery, an account of it here will be unneceſſary.

Under the treatment we have pointed out, a ſuppuration rarely happens; but if it can by no means be prevented, and matter is actually formed, it will be right to forbear as well all evacuations, as all attempts to repel; and this may in moſt caſes be diſcovered by a general uneaſineſs; a pain in the mouth; ſhiverings, ſucceeded by tranſient heats; a ſenſation of heavineſs, and thickneſs of the tongue; ſmall white puſtules or bladders on the inſide of the lips and cheeks, and on the gums; and by a diſagreeable taſte in the mouth, and a ſmell offenſive to the patient himſelf; in this caſe poultices ſhould be applied warm to the neck, and the ſteams of warm water, or rather of vinegar and water, ſhould be received into the mouth: as ſoon as the ſuppuration takes place, the ſwelling in moſt caſes abates, the ſymptoms become leſs violent, and the matter generally opens itſelf a way, either externally or internally; if not, the abſceſs ſhould be punctured or pricked as ſoon as the matter appears in a fluctuating ſtate; if it opens externally, the ulcer is commonly healed without much difficulty, but when it breaks within, the matter is apt to fall on the lungs, and occaſion ulcerations there; to prevent which the following gargle ſhould be uſed immediately after the matter begins to diſcharge.

Take tincture of red roſes, three ounces—tincture of myrrh, two drams—ſpirit of vitriol, twenty drops.

But in the lighter attacks of this diſeaſe, when the difficulty of ſwallowing is unattended with acute pain, or any degree of inflammation, and when the breathing remains free and uninterrupted, the diſorder is generally occaſioned by an obſtruction of the glands; and in that caſe, little more is required than to keep the patient warm, and to uſe ſome ſtimulating gargle, ſuch as a decoction of figs, with the addition of vinegar and honey, or a ſmall quantity of the flour of muſtard, which will generally remove the complaints; care however muſt be taken not to uſe this gargle when any tokens of inflammation appear, as it would rather add to it than contribute to it's abatement.

Indeed, a little precaution will, for the moſt part, prevent the appearance, at leaſt the danger of this diſorder; thoſe who are ſubject to it ſhould ſubmit to the regulations of temperance and regularity, and ſhould be particularly attentive to promote ordinary evacuations, and to have recourſe to extraordinary ones, ſuch as bleeding or purging, at ſuch ſeaſons of the year as they have reaſon to expect attacks.

And if all thoſe who feel the approaches of this diſeaſe would carefully apply flannels to their throats, or even the vulgar remedy of the woollen ſtocking; if they would be content to abridge themſelves for a few days in the articles of eating and drinking; if they would keep within doors, and drink pretty freely of diluting liquors, and bathe their legs and feet every night in warm water, taking care at the ſame time to keep the body open by manna, a decoction of tamarinds, or ſuch gentle laxatives; they would have little to apprehend from the progreſs of this diſeaſe, which would in moſt caſes yield to ſuch ſimple and eaſy preſcriptions.

To theſe preſcriptions the following may be added; and, combined with the foregoing, will in moſt caſes prevent the common ſore-throat from degenerating to a troubleſome and dangerous quinſey.

Uſe the jelly or ſyrup of black currants freely: the former ſhould be melted in the mouth, and ſwallowed by degrees; the latter may be uſed in the ſame way, or mingled with warm water as a gargle.

The following gargle is in general of itſelf ſufficient to carry off a ſore-throat unattended with inflammatory ſymptoms.

To half a pint of ſtrong decoction of ſage leaves, add a glaſs of Port wine, an equal quantity of good vinegar, and two teaſpoonfuls of honey.

And a flannel dipped in the following liniment and worn round the throat, renewing it twice or thrice in the twenty-four hours, will be found almoſt a ſpecific.

Take of Florence oil, two parts—of ſpirit of hartſhorn, one part. Shake them well together.

CHAP. XV.

Of the Putrid, Malignant, or Ulcerated Sore-Throat.

THE appearance of this diſeaſe in Great Britain is of a very modern date; it appears to have been well known to ſome of the ancients, whoſe treatment of it differed very widely from that at preſent in uſe; and, indeed, little information as to the method of cure can be derived from their works, though many of them deſcribed this diſeaſe accurately. It was, however, obſerved by theſe writers, that it was moſt particularly fatal to children; that though adults, if they were much about the ſick, were often ſeized with it, yet more of theſe recovered than of children: and it was alſo remarked, that more boys got through it ſafely than girls, and that ſuch of the latter as had black eyes ſuffered more in it than others.

It is a putrid remittent fever, accompanied with an ulcerated ſore-throat, or with an inflammation of the mucous membrane, being that which covers the back part of the mouth and entrance into the throat, and receives that matter which is uſually carried off through the noſtrils.

This malady is moſt frequent in the autumn, and the firſt part of the winter; and it has been remarked in this country lately, as well as in others formerly, that children and young people are more expoſed to it than grown perſons or thoſe advanced in years; that more girls have it than boys; a greater number of women than men; and that thoſe of either ſex who are weakly or infirm, are more liable to have this diſorder, and to ſuffer ſeverely from it, than the healthy and vigorous: few adults of ſuch conſtitutions are affected by it, and when it does attack them it very rarely proves mortal.

By it's more common appearance at a particular ſeaſon, it ſhould ſeem as if the weather and temperature of the air did in ſome degree contribute to it's approach, and that it might be produced by colds, which in the autumn and early winter generally prevail; but it is much oftener bred by contagion, being ſo highly infectious, that when it breaks out in a family, it generally goes through all the children, and all their immediate attendants, though in a leſs violent degree; and this in ſpite of ſeparating the healthy from the ſick, and uſing every precaution that can be adviſed.

This diſeaſe generally comes on with a giddineſs in the head, like that which commonly precedes fainting, and a ſhivering or chill reſembling that of an ague-fit; this is immediately ſucceeded by intenſe heat, and theſe ſhivering heats continue to ſucceed each other interchangeably for ſome hours, till at length the heats predominate and become conſtant and violent.

The complaints of the patient are then an acute head-ach; heat and ſoreneſs, rather than any conſiderable pain in the throat; ſtiffneſs of the neck; uſually great ſickneſs; and ſometimes, but not in all caſes, vomiting or purging, or both: the face ſoon after looks red and ſwelled; the eyes watery and inflamed as in the meaſles; and the patient grows reſtleſs, anxious, and faint.

The attack is frequently made in the morning, or early part of the day: towards the approach of night the ſymptoms increaſe in violence, and continue to be extremely troubleſome till the morning; when, after a ſhort, diſturbed, and interrupted ſlumber, (which is indeed the only reſt that can be procured for many nights) a perſpiration breaks out, which alleviates the reſtleſſneſs and heat, and gives the diſorder ſomewhat of an intermittent appearance.

If the mouth and throat be examined ſoon after the firſt ſeizure, the *uvula* and *tonſils*, or *almonds*, as they are commonly called, appear ſwelled, and, as well as the palate at the part near the throat, the farther part of the cheeks, and that muſcular or fleſhy part at the back of the throat, which is called the *pharynx*, or as much of it as can be ſeen, appear of a lively red colour; and the ſame appearance is alſo obſervable on the poſterior edge of the palate, in the angles which are above the tonſils, and upon the tonſils themſelves. Sometimes, inſtead of this redneſs, a broad ſpot or patch of an irregular figure, and of a pale or whitiſh colour, appears ſurrounded with the florid red, and this whiteneſs is like the gums when they are preſſed with the finger, or as if matter ready to be diſcharged was contained beneath it.

On the ſecond day of the diſeaſe, the face, breaſt, neck, and hands to the tops of the fingers, generally aſſume a deep claret or eryſipelatous colour, with an apparent ſwelling; and the fingers are often ſo remarkably tinged, that the diſorder is in ſome inſtances diſcoverable from inſpecting them only.

On the arms and other parts of the body, a great number of ſmall pimples appear, evidently diſtinguiſhed from the ſurrounding or intermediate ſkin by being of a deeper red; and theſe pimples are larger, and riſe higher on thoſe parts which are leſs affected by the redneſs, which are generally the arms and lower extremities: but this eruption is not a certain ſymptom, nor attendant in all caſes; nor is it's appearance certain as to time, happening ſometimes earlier, and ſometimes later.

But when the ſkin acquires this red colour, and whether accompanied with pimples or not, the ſickneſs generally goes off; the vomiting and purging commonly ceaſe of themſelves, ſeldom continuing beyond the firſt day.

The appearance in the fauces, or openings into the paſſages of the throat, continue the ſame, only that the white changes to an aſh colour; and it may now be diſcovered, that what might at firſt have been taken for the ſuperficial covering of matter in a ripened ſtate, is really a ſlough, concealing an ulcer of the ſame ſize.

The different parts of the fauces are alike liable to theſe ulcerations, but they are in general diſcernible firſt in the angles above the tonſils or almonds, or on the tonſils themſelves, though they are often to be found in all the other parts of the mouth which are neareſt to the throat, and on the baſe or root of the tongue, which they cover in the manner of a thick fur: when the diſorder is mild, a ſuperficial ulcer, irregular in figure, appears inſtead of theſe ſloughs in one or more of the ſame parts, and as the external ſkin does not aſſume the whiteneſs, is ſcarce to be diſtinguiſhed from the ſound parts but by the inequality it occaſions on the ſurface.

The parotid glands (which, as we have before deſcribed, are ſeated before and below the ears) generally ſwell on each ſide, and grow hard and painful to the touch; in ſome caſes, where the diſeaſe is violent, the neck and throat are ſurrounded with a large tumor, ſometimes extending to the breaſt; which, by ſtraitening the paſſages, adds to the danger.

Towards the approach of night, the reſtleſſneſs, anxiety, and heat, increaſe, and a delirium often comes on, in ſome caſes even on the very firſt night after ſeizure: but this ſymptom differs conſiderably from the ſame diſpoſition in other diſorders; the patient in this diſeaſe generally anſwers with propriety the queſtions put to him, but there is an unuſual eagerneſs and quickneſs in his ſpeech, and he is apt to talk wildly and incoherently to himſelf when left alone; and the firſt tendency to this diſtemper is frequently diſcoverable in an extraordinary affectation of great compoſure, eſpecially if he is diſinclined to ſleep; for ſome are heavy and drowſy from the firſt attack, and as the diſeaſe advances grow ſtupid, and take very little notice of any thing about them.

In this ſituation the patients generally continue for two, three, or four days, growing more hot and reſtleſs towards the evening; and the ſame ſymptoms, together with the delirium, increaſing on the approach of night. As the morning advances, a ſweat, more or leſs profuſe, breaks out, and gives a temporary relief to moſt of the complaints, though the languor and faintneſs remains, which indeed accompanies every ſtage of this diſeaſe from the commencement to the period.

There does not ſeem to be any fixed criſis at which this diſorder can be deſcribed to be at the height: in ſome inſtances the ſymptoms abate from the very firſt day of the ſeizure; in others, and more commonly, no appearances of recovery take place till the third, fourth, or fifth day.

The favourable circumſtances are nearly as follow; the redneſs of the ſkin wears off; the pulſe, which in the progreſs of the diſeaſe is quick, becomes much leſs ſo; the ſwellings of the neck ſubſide, (except thoſe of the parotid glands, which frequently continue hard after the abatement of the other ſymptoms, and ſometimes come to matter;) the ſloughs are caſt off; the cavities occaſioned by the ulcerations fill; the patient's ſleep is leſs diſturbed; and he awakes in a ſtate of compoſure, and begins to find ſome return of appetite.

During the whole courſe of this diſeaſe, the pulſe generally continues very quick; in ſome caſes it beats hard and ſmall, in others more ſoft but full, and it is in general without the firmneſs and ſtrength which uſually accompany quickneſs and heat in diſorders of an inflammatory nature.

The urine is at firſt crude, and of a pale whey-like colour: as the diſeaſe advances, it inclines to yellow; and on the appearance of approaching recovery, it becomes foul, and drops a ſediment like meal or flour.

The commencement of the diſeaſe is frequently attended by a purging, which is ſometimes of a bilious nature, and diſcharged without pain, though this evacuation differs in different habits: from the time the purging ceaſes, the patient has ſeldom any voluntary ſtools.

Thirſt is commonly leſs complained of in this than in other acute diſeaſes; the tongue is generally moiſt, and not always furred; but when it is covered with a thick white coat, the patient generally complains of ſoreneſs about the root of it.

The *uvula* and *tonſils* are ſometimes ſo ſwelled as to leave the entrance into the gullet extremely narrow, and though that entrance is alſo often ſurrounded with ſloughs or ulcers, yet is the ſwallowing attended with much leſs difficulty and pain than might be apprehended from ſuch circumſtances: but patients are apt to complain ſoon after they are taken ill, of an offenſive ſmell which affects the mouth and noſtrils, and occaſions ſickneſs even before the appearance of ulcerations.

When the diſeaſe is ſevere, the inſides of the noſtrils, as far up as can be ſeen, frequently appear of a deep red, or rather livid colour; and after a day or two a thin humour, ſometimes accompanied with white putrid matter of a thicker conſiſtence, flows from them, which is ſo acrid and corroſive as to excoriate or fret the part it is ſuffered to remain on for any conſiderable time: but this is moſt obſervable in very young patients, whoſe lips are alſo of the ſame deep red or livid colour, and are covered within with little bladders which contain a thin humour of the ſame quality, excoriating, as it oozes out, the corners of the mouth, or even the cheeks, if it is permitted to fall upon them.

Nor is it improbable, that ſome part of the ſame acrid humour paſſing with the nouriſhment of children into the ſtomach, may occaſion their generally ſuffering much more in this diſorder than grown perſons, producing unqueſtionably the ſame effects on the internal parts, as it does on the ſkin, of thoſe which are much leſs ſenſible, by excoriating the parts which it paſſes; and this ſeems to be frequently the caſe, when a purging, attended with the ſymptoms of ulceration, ſucceed the diſeaſe; and after the patients have endured great pain and miſery, in ſome inſtances for many weeks, they die in a ſtate of emaciation: and in theſe caſes the humour has ſometimes retained it's virulence in paſſing through the whole inteſtines, and actually corroded and excoriated the ſkin at the extremity of the gut; and the ſame complaint has ſometimes been made by grown perſons, who have been obliged to ſwallow conſiderable quantities of emollient healing liquids, and to apply them externally in fomentations, to abate the violence of this very troubleſome ſymptom.

Bleeding at the noſe is no uncommon ſymptom at the beginning of this diſeaſe; and the monthly diſcharges of thoſe of the female ſex who are of age to be ſubject to them, very commonly appear immediately after the ſeizure, notwithſtanding the regular time of their return may be at a conſiderable diſtance: if this diſorder ſeizes them about the common period, the diſcharge is generally greater than uſual, or than it ought to be; and the approach of this diſorder hath frequently brought on the periodical diſcharge in perſons who never had the leaſt appearance of it before.

Theſe evacuations are ſeldom attended either with much benefit, or any conſiderable degree of injury in ſtrong and robuſt habits, unleſs they are exceſſive; in which caſe they occaſion great faintneſs, and proportionably augment the other ſymptoms; but in tender frames and weakly habits, they are often productive of ill conſequences: inſtances have been known where patients have been ſuddenly carried off by diſcharges of blood from the noſe, and even by a profuſe bleeding at the ear; but theſe accidents generally happen after the illneſs has continued many days, and may more probably have proceeded from the ſeparation of a ſlough from the branch of an artery, than from a fullneſs of the veſſels; nor can any ſuch diſcharge be conſidered as an effort of nature to relieve herſelf by this criſis, which much oftener brings on danger than recovery.

Bleeding is ſeldom or ever allowable in this diſeaſe; and though, where it has been practiſed, the heat and quickneſs of the pulſe ſeem at firſt to be abated by it, yet this is a very fallacious reſpite; the ſymptoms generally return with greater violence, and the patient is oppreſſed with a difficulty of breathing, falls into cold and clammy ſweats, grows ſtupid, and dies ſuddenly.

Greater benefit is not to be expected from purging: gentle laxatives have brought on very dangerous ſymptoms; and even giving a ſmall quantity of manna, to procure a ſtool or two, after the diſeaſe hath continued two or three days, has occaſioned the diſappearance of the red colour, and ſurpriſingly increaſed the flux of matter to the throat; and if the diſcharge by ſtool is at all conſiderable, the ſwelling of the neck generally grows much larger, the entrances of the throat become looſe, dry, and livid, and the patient ſeldom ſurvives the appearance of theſe ſymptoms many hours.

The ſame effects are frequently experienced from adminiſtering nitrous or cooling medicines; theſe, too, increaſe the languor and faintneſs which commonly accompany this diſeaſe, and either occaſion copious weakening and waſting ſweats, or immoderate diſcharges by ſtool.

And upon the whole it appears, that every evacuation which tends to leſſen the natural ſtrength of the conſtitution is in this diſorder injurious, and that it is attended with the greateſt danger, when it attacks ſuch habits as have been weakened by previous ſickneſs, or where the ſtrength has been impaired by grief, or other indiſpoſition of the mind.

In the unfavourable ſtate and progreſs of this diſeaſe, the fauces appear dry, livid, and gloſſy; the tumor grows large externally; the patients void their excrements involuntarily, and fall into profuſe ſweats; the breathing becomes difficult and laborious, and the pulſe low; the extremities are cold; the eyes grow dim; and death in a very ſhort ſpace finiſhes the melancholy ſcene: and it has been remarked, that the approaches of death are foretold in this diſorder, by the appearance of the eyes, which loſe their luſtre and the powers of ſight earlier in this diſeaſe than in moſt others.

In order to enable our readers to diſcover the putrid and malignant ſore-throat from the common inflammatory or quinſey, it may be neceſſary to ſtate the different ſymptoms which occur, to mark and aſcertain each diſeaſe.

The *putrid malignant* and *ulcerated ſore-throat*, generally attacks children, and girls more frequently than boys; if grown perſons are ſeized with it, they are moſtly thoſe who have been much about the ſick, or ſuch as are of infirm and broken conſtitutions; and thoſe who have been weakened and reduced by ſome previous illneſs, by ſome exceſs in natural evacuations, or by any accidental diſcharges, ſuffer moſt ſeverely in it.

But the *common inflammatory ſore-throat*, or *quinſey*, generally attacks the robuſt, vigorous, and healthy; and tender, weak, and delicate habits, are leſs liable to it, and ſuffer leſs from it.

Both diſeaſes commence with a fever, and ſhivering or chillneſs; but in the putrid kind, theſe ſymptoms are followed almoſt immediately, if the ſeizure be very violent, and if leſs ſo, in a very few hours, by ſickneſs, vomiting, or purging; and an acute pain of the head, eſpecially towards the back parts or crown; and when theſe complaints are accompanied with that kind of eryſipelatous redneſs, which we have before deſcribed in the back part of the mouth and paſſages to the throat, with ſloughs and ulcers, no doubt can remain of the nature of the diſeaſe.

Another obvious and characteriſtic ſymptom of the purid ſore-throat, is the redneſs of the ſkin in the face, hands, neck, and breaſt; which ſeldom fails to ſhew itſelf in this diſorder, and particularly in children and young people.

A partial inflammation is the diſeaſe in the common ſore-throat; all the ſymptoms are inflammatory, and the principal complaint is an acute throbbing pain in the throat, which is greatly aggravated on ſwallowing even liquids.

But in the diſorder of which we now treat, the whole habit ſuffers, as if by a force of a peculiar nature; and though the throat is always affected in a greater or leſſer degree, yet this is ſometimes the leaſt troubleſome of the patient's complaints, inſtances not unfrequently occurring of conſiderable ſloughs being formed before any ſoreneſs or pain hath been felt in the parts where they have been ſeated.

This diſeaſe is very frequently accompanied with a tendency to delirium, and that too ſo early as the ſecond, and in ſome inſtances the firſt day after the ſeizure; but in the common ſore-throat, if this ſymptom appears at all, it is in the very advanced ſtages of the diſorder, and when the patient is in extreme danger.

When the patient recovers from the common ſore-throat, the ſwellings diſperſe, or the parts affected ſuppurate or come to matter; or if they ſhould be on the glands, become hard or ſchirrous: but in the putrid or ulcerated kind, neither of theſe circumſtances take place; it terminates in a ſuperficial ulceration of the throat and paſſage into the gullet, with very little appearance of ſloughs in the mild ſtate of the diſeaſe; and with large and deep ones of an aſh, livid, or black colour, where the attack is more violent.

From this comparative view of the different ſymptoms, it will not be difficult to diſtinguiſh this diſorder from a common ſore-throat, or inflammation of that part; but there is another, and too often a fatal diſtinction, which is the conſtant aggravation of all the ſymptoms after bleeding, purging, or the free uſe of cooling medicines; methods which ſeldom fail to remove a common inflammation when taken in time and purſued with aſſiduity, but which are always injurious, and too often deſtructive, when this diſorder is of the putrid kind.

In this diſeaſe it is neceſſary that the patient ſhould keep as much as poſſible in bed, even though the diſeaſe ſhould ſeem to be ſlight; neglect in this particular has often brought on a purging which has occaſioned the diſappearance of the redneſs on the ſkin: and complaints, which with confinement alone might probably have gone off in a day or two, have been rendered tedious and difficult of cure.

The patient's food ſhould in this diſeaſe be ſtrengthening and nouriſhing; and conſiſt of panada, and jellies with wine, or of chicken broths: his liquors alſo ſhould be generous and antiputreſcent; ſuch as good wine-whey, negus of Port wine, and even wine alone when the faintneſs or languor is exceſſive.

As ſoon after the attack as poſſible, and whilſt the ſickneſs and diſpoſition to vomit continue, it will be right to promote it by green tea, camomile-flower tea, or the infuſion of the *carduus benedictus* or *holy thiſtle*, or it may be adviſeable to give a few grains of the powder of *ipecacuanha*, or rather ſmall quantities of the *tartar emetic*, either of which may be worked off with moderate quantities of camomile tea: and if theſe ſymptoms do not abate with the operation of the emetic, ſmall draughts of mint tea, with a ſixth part of red Port added to it, may be taken frequently, together with ſome ſuch grateful warm aromatic and cordial medicine as the following.

Take of ſimple alexiterial water, ſix ounces—of ſpirituous alexiterial water with vinegar, one ounce and half—of cordial confection, thirty grains—of contrayerva powder, thirty grains—of ſyrup of ſaffron, half an ounce. Make a mixture, of which give from two to four table-ſpoonfuls according to age and circumſtances, and repeat every four or ſix hours.

Though vegetable acids, ſuch as the juice of lemons and oranges, wood ſorrel, verjuice, vinegar, and the like, are ſtrongly recommended in moſt diſeaſes of a putrid nature, as they are unqueſtionably of an antiputreſcent quality; yet we ought to be very circumſpect in uſing them, and eſpecially in this diſorder, as they are apt to promote too great a diſcharge by ſtool, and to occaſion profuſe ſweats, the dangerous tendency of which evacuations we have already pointed out.

And indeed it is at all times neceſſary in this diſeaſe to attend very carefully to the diarrhœa: in moſt caſes it ceaſes with the vomiting, and that within twelve hours after the firſt ſeizure; if it is of longer continuance it will be neceſſary to check it, or it will occaſion great faintneſs, ſink the ſpirits, and in the end produce the worſt conſequences. The aromatic cordials, which we have already preſcribed, adminiſtered freely, will in moſt caſes take off this ſymptom; but if they ſhould at any time prove ineffectual, it will be neceſſary to have recourſe to aſtringents and opiates, in proportion to the exigency of the caſe, ſuch as the *confectio fria caſtorii*, or diaſcordium, or the *electuar. e ſcordio*, or electuary of germander, diſſolved to the quantity of three drams in ſix ounces of ſimple cinnamon water, of which a table-ſpoonful or two may be given after every looſe ſtool.

As the redneſs of the ſkin generally appears on the abatement of the diarrhœa, and in moſt caſes diſappears again on the return of any degree of looſeneſs, patients have ſometimes been brought into extreme danger upon giving even mild laxatives, which have almoſt immediately occaſioned the re-commencement of the purging, and the diſappearance of the redneſs; and as theſe circumſtances prove a cloſe connection between the appearance of the ſkin and the diarrhœa, they point out the uſe of a warm regimen, notwithſtanding the heat and other ſymptoms of the like kind might otherwiſe render ſuch treatment a doubtful meaſure.

In moſt other fevers it is not adviſeable to apply bliſters in the beginning of the diſorder, but in this we cannot be too early in the uſe of them, and the following method of preparing them is recommended; becauſe, as in theſe caſes, the ſkin is eaſily inflamed, this mild plaſter will raiſe it ſufficiently, and will alſo at the ſame time act as an antiputreſcent.

Take two parts of the ſtomach plaſter or cummin plaſter—one part of bliſtering plaſter—and one dram and half of camphire finely powdered. Mix them well, and ſpread on leather or thick linen, and cover the ſurface with muſlin.

This bliſter may not only be applied between the ſhoulders, but below the ears down to the collar bones, as occaſion may require.

The exceſſive faintneſs is alſo another ſymptom which requires particular attention; this is a complaint which is generally made immediately after the ſeizure, and in moſt caſes continues till the diſorder abates: as the diſeaſe is more or leſs malignant, this ſymptom is proportionably violent; and when it ceaſes or becomes leſs troubleſome, recovery may be expected with confidence.

The gently ſtimulating, warm, and aromatic medicine, which we have already preſcribed to check the vomiting and looſeneſs, has in general been found uſeful in relieving the faintneſs; nor muſt a degree of heat, or a quick pulſe, diſſuade us from adminiſtering them as liberally as neceſſity may require, or as the faintneſs, occaſional depreſſion of the pulſe, and increaſed putridity about the region of the throat, may demand: one dram of Raleigh's confection, given every four hours, has been known to produce a very favourable change, and to leſſen conſiderably the faintneſs as well as the heat and reſtleſſneſs.

But perhaps no cordial will be found more efficacious than ſound and generous wine, in the uſe of which the patient ſhould be indulged, not only in his drinks and ſpoon-meats, and diluted with water, but even in moderate quantities alone, where the faintneſs is exceſſive: the patient's habit, conſtitution, and uſual courſe of life, together with the ſtate of the diſeaſe, and the appearance of the ſymptoms, will furniſh the beſt rules as to the frequency and manner of permitting the uſe of this cordial.

Nor muſt we be unmindful of the condition of the throat itſelf, and the ulcers formed there, as it will not bear any conſiderable loſs of ſubſtance without immediate danger to the patient's life, or conſequences injurious to the future action of the parts if the patient ſhould happen to ſurvive.

In the more mild attacks of this diſeaſe, the ſuperficial appearance of the ulceration is ſo ſlight, that it may eaſily eſcape the obſervation of thoſe who are unacquainted with it, or whoſe attention is not very particularly engaged in the diſcovery of it: the next degree is accompanied with a thin, pale-coloured or white ſlough, which in more malignant caſes is thick, clear, and of an aſh colour; and when the caſe is aggravated and dangerous, the appearance of the ſlough is livid or black: and theſe ſloughs are not compoſed of any foreign matter ſpreading on the ſurfaces and forming coats or cruſts, but are the ſubſtance itſelf in an actual ſtate of mortification; and whenever they come off, or are by any means ſeparated from the parts which are covered by them, they leave ulcers, of depths proportioned to the thickneſs and ſize of the ſloughs.

Theſe ſloughs in moſt caſes come off ſpontaneouſly when the tendency to putrefaction is ſtopped; or if they are large and caſt off ſlowly, the ſeparation may be promoted by touching them with an armed probe dipped in *mel Ægyptiacum*, or Ægyptian honey, or in the following compoſition.

Tincture of red roſes, two ounces—mel Ægyptiacum, two drams. Mix together.

But if, from the extreme ſwelling or ſoreneſs of the parts affected, this cannot eaſily be done, the gargle hereafter preſcribed may be uſed, adding to two ounces of it one dram of the mel Ægyptiacum.

But we can by no means adviſe any attempts to remove the ſloughs by force, or the ſcraping them with the finger or any inſtrument, much leſs can we recommend the ſcarifying them; for though both theſe methods ſeem to have prevailed in ancient practice, yet the experience of the more modern hath convinced us, that they are both injurious and extremely dangerous; in ſome caſes occaſioning immediate mortification, and in others the removal of the ſloughs hath been followed by the parts being again covered with them in the courſe of a few hours, of a larger ſize and much worſe colour, and penetrating ſtill deeper than thoſe which had been taken off.

We have already remarked, that from under theſe ſloughs, and from all parts of the ulcers covered by them, a thin acrid fluid is diſcharged, of ſo corroſive a quality as to excoriate or fret the ſkin of even the external parts where it is permitted to remain. In grown perſons, where the upper parts of the mouth or throat are affected, this fluid frequently flows through the noſtrils, and occaſions bliſters and ſores on the ſkin of the upper lip; but this effect is moſt obſervable in children, the corners of whoſe mouths, or the cheeks of the ſides on which they commonly lie, are often bliſtered, or ſtripped of the ſkin by this penetrating matter; and it is extremely probable, that many of the worſt ſymptoms of the diſeaſe, ſuch as the purging, vomiting, and faintneſs, are occaſioned by the paſſing of this matter into the ſtomach and inteſtines; and this opinion ſeems to be confirmed by a common obſervation, that when the acrid fluid is plentifully diſcharged, either by ſpitting, or through the noſtrils, the patient ſeldom ſuffers from the purging, vomiting, or faintneſs; but if the promotion of theſe evacuations is neglected, or if the patient happens to ſleep longer than uſual, theſe ſymptoms have come on with violence; which are indeed always more ſevere and dangerous where there is little or no diſcharge of this kind.

The conſtant uſe of gargles is therefore of the greateſt importance, as they promote the diſcharge not only of the thick and glutinous matter which flows to the fauces, but likewiſe of a conſiderable part of the thin acrid fluid abovementioned; and the difficulty of uſing gargles effectually with children, is unqueſtionably one reaſon why they are more ſeverely affected with this diſeaſe than grown perſons; as they either prevent by their tongues the injection from reaching the ſeat of the complaint, or ſwallow the gargle and the putrid matter from the ulcers together; and thus the miſchief extends beyond the power of art, and violent purgings, a mortification, and from thence diſcharges of blood enſue, which no power of medicine can ſtop, or any exertions of ſkill check, but the diſeaſe proves irreſiſtibly and rapidly fatal.

In the mild ſtate of the diſeaſe, where the ſymptoms are favourable, and the ſloughs ſcarcely perceivable, or appearing very ſuperficial, the gargle of ſage leaves, wine, vinegar, and honey, which we have preſcribed to be uſed in the inflammatory ſore-throat, may anſwer the purpoſe here.

But in caſe the ſymptoms ſhould be violent; if the tendency to putrefaction is apparently great; if the breath becomes offenſive; and the ſloughs large and deep; the following compoſition, varying the ſtrength as to the contrayerva and myrrh, according to age and circumſtances, will in general be found efficacious.

Take of the pectoral decoction, twelve ounces; and as it boils, add half an ounce of contrayerva root bruiſed: after boiling half an hour ſtrain it off, and add white wine vinegar, two ounces—tincture of myrrh, one ounce—honey, ſix drams. Let the honey diſſolve, and ſhake the whole well together.

Or the following gargle may be uſed—

Of the pectoral decoction, twelve ounces—of Virginia ſnake-root, two drams. Boil theſe together half an hour, then ſtrain, and add vinegar and tincture of myrrh, of each one ounce—honey, two ounces.

If the parts about the gullet are ſo affected, as to render it difficult or painful for the patient himſelf to make uſe of the gargle freely, a few ſpoonfuls of either of the above compoſitions warmed, may be often thrown on the parts affected by a ſmall ſyringe; and this ſhould by no means be omitted immediately before the patient ſwallows any food or liquids, in order to waſh off as much as poſſible of the putrid and acrid matter which may adhere to the ſores or ulcers, and prevent it's being carried into the ſtomach and bowels; and the uſe of the ſyringe is more neceſſary for young patients, who are prevented from applying the gargle to advantage, both by the ſoreneſs of the parts affected, and by the want of ſkill in uſing it.

After the diſeaſe has continued three or four days, or longer, a copious hæmorrhage, or diſcharge of blood, frequently comes on from the noſe or mouth, but more commonly from the ears; and this is, at this ſtage of the diſeaſe, a dangerous ſymptom, proceeding probably from ſome branch of an artery deſtroyed by the mortification, and laid bare by the ſeparation of the ſlough, as we have before obſerved; and if the veſſel is large, this bleeding may prove fatal to the patient in a very ſhort time, or if he ſhould ſurvive it, the loſs of much blood at this time of the diſorder may occaſion future ill conſequences.

This diſcharge, therefore, muſt be ſtopped with all poſſible expedition: if the patient is coſtive, ſtools muſt be immediately procured by clyſters or ſuppoſitories; vinegar muſt be applied by means of tents, ſponges, or otherwiſe, to the orifice of the bleeding veſſel, or as near to it as it can be conveyed; the ſteams of this acid, made hot, ſhould be conveyed plentifully into the throat and noſtrils; the patient ſhould either be taken out of bed, or ſupported in it, ſo as to be placed in a ſitting poſture, or his head ſhould be raiſed if he is too weak to bear the motion of his body, and his upper parts ſhould be kept moderately cool; his drink alſo ſhould be acidulated with ſpirits of vitriol or tincture of roſes.

As to medicines, the bark is principally to be relied on; it may be taken in ſubſtance with Port wine or claret, and in ſuch quantities as we have already directed in other putrid caſes, if the patient's ſtomach will bear it; if not, the following forms of adminiſtering it may anſwer the purpoſe.

Take of the decoction of the bark, one ounce and half—of ſyrup of ſaffron, two drams. Make a draught, to be repeated every third, fourth, or fifth hour.

Or, boil two ounces of bark groſsly powdered, and four drams of Virginian ſnake-root, in three pints of water, till it is reduced to one pint. Strain it, and add two tea-ſpoonfuls of the elixir of vitriol, and give the quantity of a common wine-glaſsful every three or four hours.

If the heat ſhould be intenſe, dulcified ſpirit of nitre, or Clutton's Febrifuge Spirit, ſhould be added to the bark, and may be freely given in whatever the patient drinks.

Whilſt the ſickneſs and vomiting continue troubleſome, mint tea with a little cinnamon, mixed with a third, or according to circumſtances an equal quantity of Port wine, will be proper for the patient's common drink, and it may be alſo right to give a table-ſpoonful or two every hour of the following ſaline julep.

Diſſolve one dram of ſalt of tartar in one ounce and half of new lemon juice ſtrained. When the efferveſcence (or boiling) is over, add mint water and common water, of each one ounce—of ſimple ſyrup, half an ounce.

The ſteams of vinegar, in which myrrh and honey have been diſſolved, are recommended to be admitted into the mouth and throat, as hot as they can be endured, through an inverted funnel placed over a narrow-mouthed veſſel; and this is by ſome preferred to gargles, though we are of opinion that both may be uſed to advantage.

Cataplaſms of the bark groſsly bruiſed, and camomile flowers boiled in vinegar, with the quantity of a grain and half or two grains of camphire added, laid acroſs the throat, and renewed three or four times a day, not only ſoften the hardneſs and ſtiffneſs of the glands in the neck, but the vapour of this warm application, drawn in at the mouth with the breath, proves equally ſerviceable. In leſs emergent caſes, flannels dipped in warm camphorated ſpirits of wine, mixed with an equal quantity of vinegar, may be applied quite round the neck.

A bath for the feet, made of the decoction of the bark and camomile flowers, with the addition of a third part of ſharp vinegar, ſhould be uſed twice or thrice in the day; if the patient's ſituation will not admit of having his feet placed in it, flannels wrung dry and applied warm to the lower extremities will afford relief.

If the application of bliſters ſhould occaſion a ſtrangury, or ſuppreſſion of urine, it will be neceſſary to foment the belly with flannels dipped in warm water, or the laſt mentioned preparation of bark, camomile flowers, and vinegar; and gentle emollient clyſters ſhould be frequently adminiſtered.

Though the patient muſt by no means be expoſed to the danger of taking cold, yet through the whole courſe of this diſeaſe care ſhould be taken to admit freſh air at proper times, and under the guard of great caution; the room ſhould alſo be kept perfectly ſweet, and the air of it impregnated with aromatics and antiputreſcents, by burning myrrh, lavender flowers, or roſemary, or by boiling them in vinegar, and conveying the ſteam into the apartment of the ſick.

Nor is it ſufficient that our care extends to the continuance of the diſeaſe, for when all the ſymptoms have diſappeared ſome dangers remain; the check given to the purging in the courſe of it will often leave a coſtiveneſs, which muſt be removed by the mildeſt laxatives, ſuch as rhubarb, ſenna, or manna.

Night ſweats, languor, weakneſs of body, and depreſſion of ſpirits, are ſometimes the effects of the putrid ſore-throat; in either of theſe caſes the bark in ſubſtance, where the patient's ſtomach will bear it, may be taken in Port wine or claret; or if it diſagrees in this way, a decoction of it acidulated with elixir of vitriol.

To theſe medicines muſt be added a moderate quantity of ſound and generous wine; exerciſe on horſeback, or in an open carriage, in fair weather; nouriſhing and reſtorative food, moſtly of the animal kind; change of air; and, if neceſſary, aſſes milk.

CHAP. XVI.

Of Colds.

AS all *colds* are accompanied by a certain degree of fever, it may be neceſſary to ſpeak of them in this place; but as obſtructed perſpiration is the occaſion of colds, and as we have already in various parts of this work, not only endeavoured to point out the cauſes, and to deſcribe the effects of theſe obſtructions, inſtead of recapitulating the various ſymptoms of colds which are ſo generally known, we ſhall recommend the moſt obvious methods of avoiding, and the moſt ſimple means of removing them.

Extremes of heat and cold, a too ſudden expoſure to either, or too quick a change from the one to the other, will unqueſtionably check the perſpiration, diſorder the body, and bring on a degree of fever; but as each of thoſe circumſtances are ſometimes unavoidable, human precaution can extend no farther than to leſſen the ill conſequences which may ariſe from them.

In order to this, it is in the power of every man to button his cloaths when he is to come into the air from a warm room, and to endeavour to keep up the heat of his body on ſuch occaſions by moving faſter than ordinary; and when he is obliged to enter a cloſe room from the cold and open air, to keep at a diſtance from the fire, and approach it by very ſlow degrees.

Expoſing the head uncovered to the fervid rays of the ſun, or ſleeping abroad under it's immediate influence, may alſo in moſt caſes be avoided.

Changing wet cloaths, and in particular ſtockings and ſhoes, is frequently neglected from no other cauſe than idleneſs or inattention; yet ſitting in wet garments, and eſpecially going near the fire in them, will ſcarce ever fail to produce a violent cold. The dangers ariſing from damp linen, beds, rooms, and houſes, may in various inſtances be leſſened by ſleeping in the blankets, or with the cloaths on, even where we cannot eſcape from the inconvenience itſelf.

Yet, notwithſtanding our utmoſt care, we are perpetually liable to obſtructions of perſpiration, and conſequently to colds; for the treatment and management of which the following directions will in general be found ſufficient.

The ſymptoms which give us notice that we have caught cold, are in many reſpects ſimilar to thoſe which precede and accompany the attack of an inflammatory fever; ſuch as oppreſſion of the breaſt, pains in the head, diſinclination to motion, and frequently heats and ſhiverings; but there are alſo other ſigns of a cold, ſuch as a fullneſs or obſtruction of the noſe, a defluxion of rheum from the noſtrils and eyes, and a diſpoſition to cough, which are in general the firſt complaints, and where proper care is taken in the beginning, the only ones that appear.

When, from theſe ſymptoms, we are taught to believe that we have taken cold, and that the ill effects of it are approaching, the firſt ſtep towards obviating danger and promoting recovery, is abſtinence from our accuſtomed food and liquors: nor is this forbearance to be exerciſed with regard to the quality only; the quantity alſo is to be leſſened, and inſtead of full meals of fleſh and fiſh, and plentiful draughts of wine or other ſtrong and fermented liquors, the patient muſt be contented with a ſcanty diet of weak broths or other ſpoon-meat, puddings, tarts, and biſcuits; and for common drink, barley-water, baulm-tea, or the decoction of barley and tamarinds, with the addition of liquorice, directions for preparing which have been heretofore given; and all his drinks may be rendered agreeably acid by the juice of lemons, oranges, the infuſion of tamarinds, or currant-jelly.

At night, white-wine whey will be very proper for thoſe who have been accuſtomed to generous liquors; in other caſes the ſame diluting drinks as are above preſcribed ought to ſerve inſtead of ſupper.

On the ſucceeding morning let the patient remain in bed a few hours longer than uſual, and encourage gentle perſpiration by tea, barley-water, or any other diluting liquid; and if the ſweating ſhould grow profuſe, he ſhould be careful in leaving his bed, and ſhift his linen, cautiouſly examining that what he is to put on hath been aired by the fire and made warm.

Under theſe regulations, we may venture to aſſert, that colds would very ſeldom continue troubleſome above twenty-four hours; nor would they be attended with conſequences which, for want of timely attention, ſoon become dangerous, and very frequently fatal; nor would coughs, inflammations of the breaſt and lungs, pleuriſies, and conſumptions, ſo often follow ſuch ſlight colds, as might in the earlier ſtages have been eaſily conquered by a very ſhort confinement to abſtinence and regimen.

Many are the methods preſcribed for getting rid of colds, ſome of them dangerous, and others abſolutely deſperate; one adviſes a cup of cold water at retiring to reſt as a never failing ſpecific, another recommends a debauch or a fit of drunkenneſs, and a third urges a ſweat procured by violent exerciſe: but water does not agree with every conſtitution, and ſhould any degree of internal inflammation have already taken place, might be productive of a diſorder much worſe than that which it is intended to cure; drunkenneſs will moſt probably expel the cold, by bringing on ſome violent fever; and the perſpiration acquired by violent exerciſe, leaves the blood in a ferment, and the body expoſed to a ſtill higher degree of obſtruction.

Of a piece with theſe experiments is the unaccountable and obſtinate determination of ſome individuals, never to regard, or as it is uſually termed, to *nurſe a cold*; priding themſelves in robuſt and hardy conſtitutions, they ſcorn to yield to the attacks of ſo deſpicable an enemy and perſiſt in endeavours to ſhake him off, till he has got too faſt hold of them to be eaſily routed; and when they are reduced to the neceſſity of being adviſed, they find, inſtead of a cold, ſome other diſorder to encounter, which not only gets the better of their hardineſs, but in too many inſtances deſtroys the fabric which has been ſo very vainly and inconſiderately expoſed.

Not that we would adviſe confinement and ſweating on every ſlight occaſion: over caution may in ſome inſtances be as productive of evil as neglect; and thoſe who accuſtom themſelves to take to their beds or rooms, and to promote perſpiration by the uſe of diluting liquors on every ſuſpicion of a cold, will bring on by degrees a general relaxation, which may render the habit ſo ſuſceptible of colds, as to be ſcarce ever free from them. Thoſe who are very apt to take cold ſhould uſe conſtant moderate exerciſe, bathe in cold water, and take ſuch medicines as increaſe the vigour of the circulation, and ſtrengthen the whole ſyſtem; and the diſpoſition to take cold may in a great meaſure be leſſened by gradually acquiring a habit of expoſure to ſudden changes of heat and cold. Nor will gentle exerciſe in dry weather, either in walking, on horſeback, or in a carriage, be at all improper during the continuance of a cold; care being taken not be out after ſun-ſet, nor in a damp, moiſt, or ſharp air.

But if the cold ſhould reſiſt the treatment and regimen which we have preſcribed, it may be right to bathe the legs and feet in blood-warm water immediately before going to bed, drinking directly after a draught of wine whey, or ſome other diluting liquor; this method will often ſucceed in reſtoring the perſpiration, when other attempts fail.

Should the cold notwithſtanding continue, and the ſymptoms increaſe in violence; ſhould the pulſe become quick and ſtrong; ſhould the pain in the breaſt and the difficulty of breathing be augmented; and a dry ſkin, accompanied with much thirſt, indicate the approach of an inflammatory or ardent fever; bleeding and a bliſter between the ſhoulders may be neceſſary, together with a frequent repetition of the ſaline mixture, and ſmall doſes of nitre and rhubarb, treating the patient in all reſpects as in the beginning of a ſlight fever.

By theſe meaſures, purſued in ſeaſon, the complaints will in moſt caſes be removed in three or four days; and ſymptoms which threatened a fever of a very ſerious nature, will generally give way to well-timed precautions, and gentle but early applications.

But above all things let heating poſſets of treacle, ale, and the like, and warm medicines to promote perſpiration, be avoided; the diſpoſition of the blood to fever does not require augmentation, nor will ſweats produced by violence relieve: all that is neceſſary to effect the cure of the cold, is to take off the contraction of the veſſels, and to reſtore perſpiration; and this will more ſpeedily be done by abſtinence, moderate warmth, a little indulgence in bed, and diluting liquors, than by all the medicines in the apothecary's ſhop; the adminiſtration of which, when they are unneceſſary, will anſwer no other purpoſe than to create an occaſion for the uſe of them.

CHAP. XVII.

Of Coughs.

COUGHS are in general occaſioned by colds, ſometimes attending them as a ſymptom from the beginning, and at others produced by miſmanagement or neglect; in either caſe, the progreſs of a cough is troubleſome, and the continuance of it dangerous, weakening digeſtion, deſtroying the appetite, and by degrees producing a general relaxation and bad habit of body, and frequently ending in hectic fevers or conſumptions.

A cough is a violent expulſion of ſome kind of matter from the bronchia, or branches of the lungs, by means of a convulſive ſpaſm or compreſſion, and is always accompanied with a difficulty of breathing.

The regimen which we have preſcribed in colds, muſt be ſtill more ſtrictly obſerved when they are attended with coughs; wines, ſpirits, malt liquors, and high food, muſt be omitted, and a light diet and diluting liquors ſubſtituted; a regular, moderate degree of warmth will alſo be uſeful.

Coughs are uſually dry in the beginning, and in this ſtage may generally be removed by keeping the body open, promoting gentle perſpiration, and chewing after every fit of coughing a ſmall bit, to the amount of a ſcruple at a time, of the Peruvian bark.

But as the common remedies preſcribed at the commencement of a cough are generally oily and ſweet medicines, the digeſtion is ſoon ſpoiled, the cough grows moiſt, the breaſt is oppreſſed with tough and glewy phlegm, and it becomes neceſſary to apply to ſuch medicines as may promote expectoration, and aſſiſt in throwing it off; and for this purpoſe the ſolution of gum ammoniac may be given in the quantity of a table-ſpoonful or two, according to circumſtances, twice or thrice a day, or oftener if neceſſary.

The vinegar or oxymel of ſquills hath alſo been recommended in the following form.

Take of the vinegar or oxymel, one ounce—ſimple nutmeg water, one ounce—common water and balſamic ſyrup, of each four drams.

A table-ſpoonful or two to be taken three or four times a day, when the cough is moſt troubleſome.

To make the vinegar of ſquills—

Take of ſuch of the roots of ſquills as are plump, freſh, and full of a clammy juice, one ounce—diſtilled vinegar, a pint. Let it ſtand twelve or fourteen days, ſo near the fire as to receive a gentle heat; then ſtrain it off, and add about an ounce of proof ſpirits.

For the oxymel—

Infuſe an ounce of ſquills well bruiſed, for ten or twelve days, in a pint of diſtilled vinegar, near the fire; then ſtrain it off, and add to the vinegar half a pound of honey, and boil till it becomes a ſyrup.

If the cough is violent, bleeding is neceſſary; but this operation ſhould only be performed where the patient is young and of a ſtrong conſtitution: and if a quick and high pulſe indicate a conſiderable degree of inflammation: in weak habits, and where the patient is advanced in years, the loſs of blood will prove injurious.

It may alſo be right to give a gentle emetic of ipecacuanha, if the phlegm ſeparates with difficulty, or occaſions nauſea or ſickneſs.

In theſe caſes the following medicines, adminiſtered occaſionally as the violence of the ſymptoms demand relief, will anſwer the purpoſes of keeping the body open, and allaying the irritation or tickling, which is often ſo troubleſome as to prevent the patient from taking reſt.

Take of the ſtorax pill, ſix grains—of Rufus's pill, ten grains. Make a bolus with conſerve of roſes, to be taken going to bed.

Take of oil of ſweet almonds, and ſyrup of poppies, of each one ounce—fine ſugar, three drams. Make a linctus, and take a tea-ſpoonful when the cough is urgent.

Take of pure water, one ounce and half—of freſh lemon-juice, three drams—of ſalt of hartſhorn, eight grains—of ſpermaceti, diſſolved with yolk of egg, half a dram—of nutmeg water, three drams—of balſamic ſyrup,

> rup, one dram. Make a draught to be taken every ſix hours, adding to that which is adminiſtered at night from five to fifteen drops of liquid laudanum, if the patient is reſtleſs.

When the defluxion is thin and acrid, ſoftening medicines will be proper, and a decoction or infuſion of the roots, leaves, and flowers of the wild or common mallow, or of the leaves of marſh mallows; colt's foot, or wild poppy leaves; may be frequently taken in the quantity of a tea-cupful, to which may be added, towards night, a tea-ſpoonful of the paregoric elixir.

To make the paregoric elixir—

> To half a pound of the volatile aromatic ſpirit, or ſpirit of ſal volatile, add of the flowers of Benzoin, or Benjamin, two drams—of opium ſliced or ſcraped, one dram. Infuſe for five or ſix days, ſhaking the bottle well three or four times a day, then let it ſettle, and ſtrain off.

The Spaniſh infuſion is alſo recommended.

> Take an ounce of Spaniſh juice, commonly called Spaniſh liquorice—of ſalt of tartar, three drams. Pour on theſe ingredients a quart of boiling water; let them infuſe twelve hours, then ſtrain off, and add an ounce of the ſyrup of poppies.

This is alſo called *Fuller's Infuſion*, and the quantity of a ſmall tea-cupful, given two or three times a day, will aſſiſt in relieving the cough; the Engliſh juice of liquorice is in all reſpects as good as the Spaniſh.

Lozenges of various kinds may alſo be kept in the mouth occaſionally, as well as the common barley-ſugar, or ſugar-candy; in particular, fruit lozenges will be found uſeful in looſening and promoting the diſcharge of the tough phlegm, without bringing on a loathing, ſickneſs, and diſagreeable fulneſs of the ſtomach.

Occaſional drains or evacuations will prove ſerviceable in tedious and obſtinate coughs; for this purpoſe, ſetons, iſſues, or bliſters, may be opened as circumſtances ſhall direct; if the habit of body ſhould forbid the application of the latter, a plaſter of Burgundy pitch may be ſubſtituted, which ſhould be placed between the ſhoulders, and taken off and wiped every three or four days, renewing it at the end of fifteen or twenty days, or ſooner if appearances beſpeak a neceſſity for it.

Hitherto we have treated of ſuch coughs as are commonly attendant on colds, and the uſual conſequences of neglecting to take early care of them; but there are alſo coughs which are the common companions of particular diſorders, and others which occur without the ordinary ſymptoms of colds, and which appear to be themſelves original diſeaſes; though, perhaps, ſome of theſe are alſo occaſioned by obſtructed perſpiration, and the other cauſes of taking cold.

Symptomatic coughs we have already conſidered under the different heads of *conſumptions*, *worms*, *teeth*, and other diſorders on which they are frequently attendant; and farther notice will be taken of them in the ſubſequent parts of this work, as they accompany other diſeaſes.

Of ſuch coughs as appear to proceed from cauſes either remote from, or not abſolutely dependant either on colds, or other diſorders, it may be neceſſary to give ſome account.

Coughs are ſometimes occaſioned by a foul or weak ſtomach; and this may be diſcovered by obſerving, that though the cough is extremely troubleſome, yet it is not particularly excited by drawing the breath, which never fails to produce diſagreeable conſequences in that cough, the ſeat of which is in the lungs.

The cure of the cough which proceeds from a foul ſtomach, muſt be effected principally by cleanſing and ſtrengthening medicines, in vomits and purges ſuited to age, conſtitution, and circumſtances; the former may be of ipecacuanha, or the antimonial or emetic wine; the latter ſhould be of the bitter kind; and *tinctura ſacra*, or the ſacred tincture, may be given in ſmall doſes, not exceeding two table-ſpoonfuls, every day, or even twice a day, ſo as to keep the body moderately open, by procuring two or three ſtools in every twenty-four hours.

To make the ſacred tincture—

> Infuſe two ounces of hiera picra in a quart of ſtrong white wine. Let it ſtand ſix days, ſhaking the bottle frequently, then pour it off fine.

The following is the compoſition of *hiera picra*, or the holy bitter.

> Take of the gum of ſuccotrine aloes, four ounces—of Winter's bark, one ounce. Mix and reduce them to a very fine powder.

Coughs which ariſe from weakneſs of ſtomach require the bark, which may be either taken in ſubſtance, in a decoction, or in tincture prepared as follows.

> Take of Peruvian bark in powder, two ounces—of Virginia ſnake-root, half an ounce—Seville orange-peel and cinnamon bruiſed, of each half an ounce—of proof ſpirit, a quart. Infuſe the whole a week in a moderate warmth, then ſtrain or pour off fine.

Of this tincture an ounce may be taken once or twice a day, mixed with an equal quantity of ſimple cinnamon water.

If a cough is nervous, which may be diſcovered by it's being accompanied with cramps and twitches, not only of the breaſt and ſtomach, but even in ſome caſes of other parts of the body, ſuch treatment will be neceſſary as in the ſlighteſt attacks of a nervous fever, though change of air, gentle exerciſe, and opiates adminiſtered in moderate quantities, will frequently be found ſufficient to remove it. If the ſpaſms are violent, bathing the lower extremities in warm water will ſometimes give immediate relief: in almoſt every caſe the Thebaic tincture, or liquid laudanum, is the beſt opiate that can be offered; in this it may be taken, in quantity from ten to twenty drops, once in the twenty-four hours.

There is alſo a diſeaſe which ſeems to differ from other coughs, being occaſioned by cauſes ſomewhat different, and exhibiting ſymptoms which do not attend other kinds of this diſorder.

This is the *catarrhal cough*; or, when it aſſumes a very inflammatory appearance, the *catarrhal fever*, which is moſt common in cold ſituations in the ſpring and autumn, and in very changeable weather, and generally attacks perſons of a particular conformation of body; ſuch as thoſe who are narrow-cheſted or long-necked; thoſe who are ſubject to coughs, or are of lax, phlegmatic, or weakly conſtitutions.

Catarrhs are deſcribed as of two ſorts, the *hot* and *cold*; the former when the ſymptoms at the beginning of the diſeaſe are inflammatory, and it commences with a degree of fever; and the latter, when no conſiderable inflammation occurs at all, or not till the diſorder is advanced. Theſe catarrhs may proceed from an increaſed ſecretion of matter on the membrane of the noſe, occaſioned by ſome check given to the perſpiration, from hot and ſpicy diet, ſpirituous or fermented liquors, or from any violence of the paſſions of the mind.

But there is alſo a third catarrh, which may be attended with a very vehement cough, and which is uſually called a *ſuffocating catarrh*; and this is either produced by the rupture of an abſceſs in the lungs; by a palſy of the nerves, which ſerve the purpoſes of breathing; or by a polypus or coagulation of blood in the veſſels of the lungs.

The ſymptoms of the *hot catarrh* are redneſs, ſoreneſs, and heat in the eyes and eye-lids, together with a ſenſe of ſtretching the ſkin of the latter as if they were ſwelled; the tears flow involuntarily, and are of ſo acrid a quality, as to inflame the cheeks as they run down; the noſe ſeems ſtuffed, and the noſtrils ſwelled; the voice is altered, and the ſenſe of ſmelling impaired; and in proportion to the degree of inflammation, a thin matter flows through the noſtrils, which occaſions ſneezing, and is ſharp, acrid, and corroding; the rheum ſeparated in the noſe, windpipe, or lungs, inflames thoſe parts; the noſe and even the whole face is puffed up, and the patient complains of languor, heavineſs, deafneſs, and ſoreneſs of the ears; the tonſils of the throat and the adjacent parts are red, hot, and ſore; and a ſecretion of watery matter occaſions a conſtant tickling troubleſome cough; in ſome inſtances the whole mouth is ſore, the tongue fretted in different parts, the glands are tender, and a conſtant ſpittle flows, which inflames and chops the lips: theſe ſymptoms, or ſuch of them as occur, are generally more troubleſome towards night, but abate in the morning, on the approach of a gentle breathing ſweat. In weak habits, the pulſe is ſometimes quick but not ſtrong, the appetite is loſt, and the complaints in the evening are more aggravated.

In the *cold catarrh* the ſecretion of matter comes on firſt with a running from the noſe; this matter is not watery, or of ſo acrid a quality, but rather of a glewy conſiſtence; as this paſſes into the throat it produces a cough, by which it is endeavoured to be thrown off, and ſometimes a nauſea and inclination to vomit; the expectoration is moſt conſiderable after ſleeping, but it occaſions no particular ſoreneſs or ſtuffing of the noſtrils: after ſome days inflammatory ſymptoms appear, but ſeldom violent, and the matter becomes more thick and glutinous; as the diſeaſe proceeds, it grows yellow, and then the ſymptoms generally abate, the phlegm returns to a whitiſh colour, decreaſes in quantity, and ſo the diſorder goes off.

The *ſuffocating catarrh*, where the lungs are affected, produces a ſoreneſs and tightneſs on the breaſt; pains in that part or in the ſide; a great difficulty of breathing, and a vehement cough without expectoration, occaſioning head-ach, ſickneſs, and diſpoſition to vomit.

The regimen muſt be adapted to the different appearances of the diſeaſe; when the ſymptoms are inflammatory, heating diet and liquors muſt be carefully avoided, and the uſe of light food, with diluting liquors, muſt only be permitted: if the patient ſhould be low, or the pulſe languiſh, wine whey may be allowed; but upon the whole he ſhould rather live low than the contrary, and a moderate degree of warmth is in theſe diſeaſes neceſſary.

Bleeding may be of uſe according to age and ſtrength of body, with moderate laxatives, and gentle perſpiration; after purging, mild opiates may be given at night, joined with a ſmall quantity of the tartar emetic; and if the pain in the breaſt is violent, it may be right to apply a bliſter as near as it can be conveniently placed to the part affected; the feet may alſo be bathed in warm water at night, which may relieve both the head-ach and cough; and if the inflammation is not conſiderable, the following pill may be taken.

Of the ſaponaceous, or ſoap pill, three grains—of ſweet almonds blanched, ten grains—of emetic tartar, two grains. Make ſix pills, one of which may be taken every eight hours.

In old catarrhs, and coughs of long continuance, purgatives ſhould be frequently uſed, together with opiates, in ſuch proportions as not to leſſen the efficacy of the laxatives; for this purpoſe—

Take of Rufus's pills, fifteen grains—of the ſoap pills, eight grains. Make three pills, one to be taken occaſionally.

When the cough is intenſe, and occaſions internal ſoreneſs of the breaſt or ſtomach, pectoral drinks, ſuch as linſeed tea, infuſion of the leaves of marſh mallow, and the like, may be taken to advantage; and ſoftening mixtures with ſpermaceti may alſo be uſed, as preſcribed in coughs occaſioned by colds.

Perſons who are ſubject to catarrhal complaints, muſt be extremely careful of relapſes, which are very apt to happen from imprudent expoſures to the air, neglect of medicine, or the omiſſion of warm cloathing; in theſe caſes the patient will probably go through all the ſymptoms afreſh in a degree of aggravation, when his ſtrength is exhauſted, and he is unable to ſupport the conflict.

CHAP. XVIII.

Of Inflammations.

INFLAMMATION is an increaſed circulation of the blood from irritation, and may be either external or internal, partial or univerſal.

Inflammations may be occaſioned by bruiſes, wounds, ſprains, diſlocations, ſudden and violent colds; ſpicy, hot, or ſtimulating diet; exceſſive uſe of ſpirituous liquors; and the like: and the principal effects of inflammations are heat, pain, ſwelling, redneſs, a quickened pulſe, a dryneſs of the ſkin, and itching.

The diviſions and ſub-diviſions of inflammations are too numerous to be ſpecified; yet, like the different kinds of fever, they are all but inflammation under various different circumſtances.

In ſome caſes inflammation ſoon goes off, in others it is removed with difficulty, and it very frequently ends in other diſeaſes; but it can only be carried off by a removal of the immediate cauſe, which is the irritating matter; and it is generally ſaid, that by whatever means it is produced, it muſt either terminate in reſolution, (or diſperſion) ſuppuration, or mortification.

The firſt method is in moſt caſes deſireable, eſpecially if the degree of inflammation be inconſiderable, and the patient in other reſpects healthy: and for this purpoſe the patient muſt ſubmit to a proper regimen; bleeding, purging, and other evacuations, muſt be procured by art; and the efforts made by the natural diſcharges ſhould be carefully promoted. When the ſeat of the inflammation is in the ſkin, ſaturnine applications will be proper, ſuch as Goulard's Vegeto-mineral Water, as alſo vinegar and ſpirits of wine, or vinegar and oil, and ſuch other ſoothing and cooling medicines as will neither increaſe the ſwelling, the hardneſs, the pain, or the heat.

Suppuration, or the formation of matter, is properly rather a conſequence of inflammation than a mode in which it may be ſaid to terminate: when any quantity of blood falls into a cavity during the continuance of inflammation, it ferments and becomes matter; this afterwards communicates the fermentation to the ſolid parts adjoining, and gives occaſion for the converſion of thoſe into ſimilar matter, and the inflammatory ſymptoms then abate.

In the operation of this fermentation, the fever will be conſiderable, the humour or abſceſs will increaſe in ſize, and the progreſs of it will be accompanied with heat and a violent throbbing pain. When theſe ſymptoms denote the forming of matter, all attempts to diſſolve or diſperſe the inflammation ſhould be laid aſide, and the ripening ſhould be promoted by poultices till it either burſts and diſcharges of itſelf, or is in a fit ſtate to be opened by cauſtics or the lancet.

The approach of a mortification may be diſcovered by the appearance of the inflamed parts, which aſſume a livid or dark purple colour, and the ſkin becomes full of blackiſh puſtules; that which is adjacent is pale or of a copper colour; the ſwelling decreaſes; the fleſh ſeems looſe; and a ſinking pulſe, and cold ſweats, foretel ſpeedy mortality.

In theſe caſes the bark, as an internal medicine, is the only known ſpecific; but it ſhould not be given indiſcriminately: in weak and feeble habits it cannot be improper; but where ſymptoms of inflammation occur, and the body appears to be in that ſtate, it ſhould be adminiſtered with great caution, and not without being accompanied by nitre or mineral acids.

For external applications the following is recommended.

Take ſimple lime-water, one pound—camphorated ſpirit of wine, three ounces—ſpirit of ſal ammoniac, half an ounce. Mix theſe ingredients, warm the mixture, and waſh the parts with it frequently.

To make the lime-water—

Take of quick-lime, one pound—of water, one gallon and a half. Pour the water on gradually; and after the ebullition or boiling is over, let the lime ſubſide, and the liquor be filtered through paper.

Cataplaſms or plaſters are alſo to be applied, ſuch as the cumin plaſter, London treacle, or lye and bran.

When the increaſe of the mortification requires that the part ſhould be ſcarified, a warm antiputreſcent fomentation of wine, camphire, camomile flowers, the bark, and the like, ſhould be applied warm immediately after the operation; and it may afterwards be dreſſed with baſilicon and oil of turpentine, and bladders of warm water may be laid over the dreſſings, and renewed as the water grows cold.

In all inflammations, the body ſhould be kept open; internal ones are conſiderably relieved by the frequent uſe of clyſters; and vapours and warm baths will alſo contribute to the removal of theſe complaints.

Upon the abatement of the inflammation, guiacum, ſaſſafras, and other attenuating or ſoftening medicines, may be uſed to advantage.

CHAP. XIX.

Of Inflammations in the Eyes and Ears.

AN *inflammation in the eye*, called alſo *ophthalmia*, affects the membranes which inveſt the eye, particularly the conjunctive, being that which makes the white of the eye; it is extremely ſenſible, and abounds with blood-veſſels, which are very viſible in inflammations; it covers ſo much of the eye as is called the *white*, and lines the two eye-lids, preventing any thing from falling into the orbit or circular cavity in which the eye is placed.

It is almoſt impoſſible to enumerate the various kinds of this diſorder, or the numberleſs accidents and circumſtances by which it may be occaſioned.

It may proceed from any internal cauſe whatever, capable of exciting inflammation; or from external blows, bruiſes, or other injuries; from ſparks of fire flying into the eye; from inſects, lime, aſhes, or duſt, blown into it; an exceſſive degree of light; expoſure to the ſun; ſtedfaſtly looking at any object, and particularly ſnow or any thing white; writing or reading a great deal by candle-light; approaching too frequently large fires or other intenſely heated bodies; expoſure to ſevere flaſhes of lightning; the glitter of metals or fire-arms; and, in ſhort, whatever refracts the rays of light, and throws them more ſtrongly than uſual on the pupil.

Inflammations in the eyes may alſo proceed from exceſſes in eating, drinking, or the indulgence of the paſſions; from accidental growth of hairs in the eye-lids, which ſometimes turn inward and hurt the eye as if it was pricked with a pin; from wood fires, to thoſe who are unaccuſtomed to them; and from melting metals and minerals.

This complaint in ſome caſes ariſes from habit of body; ſuch as ſcrophulous or ſcorbutic humours, taints of a venereal nature, and even from gout.

It ſometimes alſo proceeds from imprudently ſtopping old drains or evacuations, and from drying up violent eruptions in the head or face, or running ears; and theſe complaints frequently follow the ſmall-pox and other eruptive diſeaſes.

Whole families and neighbourhoods are often affected with it at the ſame time, from whence it may ſeem to be epidemic and infectious; but the prevalence of this diſorder at particular times and places may more probably be owing to damp and moiſt air, to rainy ſeaſons, or to low unwholeſome ſituations.

An inflammation in the eye is attended with all the uſual inflammatory ſymptoms; ſuch as ſwelling, hardneſs, or ſtiffneſs; redneſs, pain, itching, ſmarting, and heat; the light is offenſive; all objects appear through a kind of miſt, and particular forms ſeem floating in the air before the eye; ſcalding tears burſt from it, and flow in conſiderable quantities; and the arteries in the temple throb violently.

When this complaint is of long continuance; when it is accompanied with a violent pain in the head, and eſpecially over the temples; when the forehead itches, and the patient falls into profuſe night ſweats; great danger may be apprehended, even to life itſelf; at leaſt it brings on dimneſs, ſpecks, and ſometimes total loſs of ſight. Slighter inflammations, and ſuch as are occaſioned by accidental injuries, are ſeldom either of long continuance, or attended with any diſagreeable conſequences. Nature ſometimes relieves theſe diſorders by a voluntary diarrhœa, by a hæmorrhage or bleeding from the noſe, or by the bleeding piles; and it frequently ſhifts from one eye to the other in a few hours, in which caſe it is of no very obſtinate kind, nor of long duration.

All inflammations of the eye are attended by a certain degree of fever, more or leſs violent according to the ſymptoms and the patient's conſtitution and habit of body; the pulſe is in moſt caſes ſtrong and quick; and if the complaint continues many days, thirſt, coſtiveneſs, a foul tongue, and reſtleſſneſs or want of ſleep, are not unuſual.

In the courſe of this diſorder all heating, ſpirituous, and ſpicy food, muſt be avoided; a cooling liquid diet will be neceſſary; a forbearance from all violent exerciſe muſt be enjoined, and the mind ſhould be kept quiet as well as the body; the room in which the patient ſits ſhould be darkened; he ſhould avoid the fire, and whatever may promote coughing, ſneezing, or other agitation of the head; and he may wear a ſhade over his eyes of paſteboard covered with dark green, brown, or black ſilk.

Bleeding is the firſt ſtep to be taken towards a cure; the quantity of blood taken away muſt be proportioned to the quickneſs and hardneſs of the pulſe, and to the age, conſtitution, and ſtrength of the patient: if this bleeding can be effected in the jugular vein, it will be the better, and from eight to twelve ounces may be drawn; but if the vein of the arm is opened, leeches ſhould alſo be applied to the external corners or angles of the eye.

As ſoon as theſe operations are performed, which muſt be repeated if the inflammation continues obſtinate, a cooling purge ſhould be given of manna, ſenna, rhubarb, or the like; and ſmall doſes of Glauber's ſalts may be repeated every day if neceſſary, ſo as to produce three or four ſtools in every twenty-four hours, till the violence of the ſymptoms abate. It will alſo be right to drink freely of diluting liquors, and particularly at going to reſt, in order to excite perſpiration, which will very conſiderably contribute to relieve the pain, eſpecially if the patient's legs and feet are firſt bathed in warm water.

Bliſters, iſſues, and ſetons, are alſo adviſeable; the former ſhould be placed either on the temples, behind the ears, or on the fore part of the head, the hair being previouſly cut off, and the part ſhaved; and theſe bliſters ſhould be kept open as long as the inflammation continues, or even ſome time after it's diſappearance, to prevent a return.

Iſſues ſhould be made in the arm next the eye which is moſt affected, and ſetons may be fixed under the jaw in caſe one eye only is inflamed, or under the chin if both ſuffer; theſe drains are, however, but ſeldom neceſſary, if bliſters are applied in ſeaſon, and the diſcharge from them continued: ſome recommend a ſeton between the ſhoulders, as preferable to any other evacuation of the kind.

Bathing the eyes with warm milk and water, is ſerviceable in ſlight attacks; but if the pain is intenſe, cataplaſms or poultices of white bread and milk laid over the eye may afford relief.

Goulard's vegeto-mineral water is highly recommended by ſome; beginning with it weak, and increaſing it's ſtrength as the eye becomes habituated to the uſe of it: whether the inflammation is ſcrophuſous, cancerous, or eryſipelatous, this water is ſaid to be of ſingular efficacy; as alſo when it proceeds from blows, bruiſes, or other external injuries.

When the diſorder begins to give way, and after bleeding, purging, and other neceſſary evacuations, the common collyrium or eye-water is uſeful to cool the part, and ſtop the defluxion, and may be made as follows.

> Take of white vitriol, broken into ſmall pieces, from one ſcruple to one dram. Diſſolve it in two ounces of water, ſhake it well, then filter through paper.

Begin to uſe the weakeſt firſt, and proceed to the ſtronger by degrees. Dip a fine linen rag in it, and touch the eye-lids gently ſeveral times a day, and particularly at going to bed.

When the humour is thick, and forms a dry ſcurf about the eye; and when ſmall membranes begin to form in the corners, which ſometimes happens after the ſmall-pox and meaſles, a grain of blue vitriol may be diſſolved in an ounce of water, and applied as above.

The following mixture is alſo recommended.

> Take of camphorated ſpirit of wine, three drams—of roſe water, two ounces. Shake them well together.

But this ſhould by no means be uſed when any conſiderable defluxion of a hot acrid quality attends the inflammation, with redneſs or itching, as it will increaſe the ſymptoms.

When the eye has almoſt been deprived of ſight and ſenſibility, and the inflammation has been deep, violent, and dangerous, *warm camphorated ſpirit of wine* mixed with the *Peruvian balſam* hath produced very favourable effects; but it ſhould be obſerved, that the quantities of camphire uſed ſhould be very moderate; for, though weak ſolutions of it abate the inflammation, larger proportions will operate in a way quite contrary.

Any cooling liniment, containing a ſmall quantity of opium, may be uſed, and will contribute to leſſen the inflammation; and when the humour that is diſcharged from the eyes is apparently ſharp and corroding, they may now and then be waſhed with a thin ſolution of gum Arabic, or the mucilage or jelly of boiled quince ſeeds.

If the eyes ſhould remain weak or tender, after the diſappearance of the inflammation, a curd made with alum boiled in milk, may be ſpread thin on a linen rag, and applied over the eyes by way of cataplaſm, or they may be frequently waſhed with the following mixture.

> Diſſolve a dram of alum in half a pint of water; add the white of one egg, and beat all well together.

And bathing in the ſea or the cold bath are recommended to compleat the cure; if neither of theſe can be conveniently uſed, waſhing the head every morning with cold water, or pouring water upon it, will be beneficial.

Others adviſe cold water, with the addition of a ſmall quantity of brandy or vinegar, as ſtrengthening and reſtorative to the ſight after violent inflammations: and direct that the whole eye be immerſed in one of thoſe mixtures, which may be done by means of a ſmall baſon, or wide glaſs filled to the brim.

When films attend or accompany defluxions on the eyes, or when the tranſparency of the cornea, or external coat of the eye, is impaired, the following remedy is ſaid to be of great uſe.

> Take of beſt borax, half a dram—of white ſugar, one dram—of roſe water, two ounces. Mix them well together, and drop a ſmall quantity frequently into the eyes, or into that which is affected.

The common ſolution of vitriol will generally remove pimples, which are apt to attend theſe inflammations; if this ſhould fail of ſucceſs, and matter ſhould form in them, open them with the point of a lancet, and waſh the part with the collyrium or eye-water laſt mentioned.

When the inflammation has been occaſioned by blows or bruiſes, and a blackneſs remains about the eye, waſh it frequently with the following mixture.

> Take of diſtilled vinegar, two ounces—of ſpirit of ſal ammoniac, half a dram. Shake them well together.

If the inflammation of the eyes proceeds from gout, it will hardly be removed till that diſeaſe is brought into the extremities; when that happens, the complaint in the eyes will vaniſh of courſe; but if it ſhould be violent, it will be neceſſary to bleed and purge with aloes; and in that caſe the eyes ſhould be waſhed with warm water, adding as much brandy as the patient can endure.

When a ſcrophulous habit hath occaſioned the diſorder in the eyes, the Peruvian bark is the only ſovereign remedy; the body ſhould be kept moderately open, the head waſhed every morning, and the bark taken in ſubſtance three or four times a day, or if that ſhould diſagree it may be given in the following form.

> Take two ounces of Peruvian bark powdered, and half an ounce of Winter's bark; boil them in two quarts of water till it is reduced to one; add as it boils an ounce of liquorice root ſliced, let it ſettle, and then ſtrain or pour off fine.

Two, three, or four table ſpoonfuls, according to age and ſtrength of conſtitution, may be given twice, thrice, or even four times a day; the effects, however, of this medicine are ſlow, and ſtill more ſo in this way than taken in ſubſtance; but a cure of this diſorder, and a palliation of the other ſcrophulous ſymptoms, may be expected from perſevering in the uſe of it; if nitre to the quantity of a ſcruple be alſo adminiſtered twice a day, it will aſſiſt the operation

tion of the bark, and be found efficacious in this as well as common inflammations of the eyes: during this courſe of the bark, the patient muſt be indulged in a more generous manner of living, and allowed to drink ſmall quantities of wine, diluted or not as circumſtances may direct.

Æthiop's mineral hath alſo been recommended in obſtinate inflammations of the eyes, whether occaſioned by ſcrophulous or venereal taints; but in the adminiſtering mercurials great caution is neceſſary, and we cannot adviſe the uſe of them, but under the directions of perſons of knowledge and ſkill: alteratives, or medicines which correct the humours, may be applied with much more ſafety; but in venereal caſes, the vitriolic water muſt by no means be tried; purging, the warm bath, and in ſome inſtances bleeding in the foot, have been found uſeful; and linen rags dipped in water and brandy, and laid over the eye, will procure immediate relief.

To avoid the returns of this troubleſome diſorder, thoſe who are ſubject to it will do well to abſtain from high living, much wine, and ſpirituous liquors; to be regular in all reſpects, and in particular to avoid expoſure to damp, moiſt, or ſharp air, and eſpecially that of the night.

Inflammations in the *ear* affect the whole membrane which lines the internal part of it, and which is extremely ſenſible and full of nerves.

It may be occaſioned by colds; a check of perſpiration, by going into the air without a hat or other uſual covering; by ſitting with the ſide of the face againſt crevices in the wainſcot; or by any of the other cauſes which commonly bring on inflammation.

It may alſo be produced by foreign bodies getting accidentally into the ear, ſuch as pins, worms, flies, or the like, or by a faulty quality in the wax; it ſometimes alſo happens that the diſeaſed matter in acute diſorders paſſes to the ear, and occaſions inflammation and deafneſs.

The ſymptoms of this complaint are at firſt a kind of pricking, ſhooting, or gnawing pain: this increaſes to a degree of violence; the glands ſwell and throb exceedingly, eſpecially if there is any tumor or tendency to matter, and the whole ſide of the face ſeems affected with a great weight.

As the pain increaſes, it is generally accompanied with a fever, reſtleſſneſs, and watchfulneſs, and ſometimes brings on fainting, delirium, and even convulſions.

If the inflammation is occaſioned by a cold, the head ſhould be kept warm, and the patient ſhould live low, and endeavour to promote gentle perſpiration by drinking freely of diluting liquors; if, notwithſtanding, the diſorder ſhould gain ground, it may be neceſſary to bleed; to open the body with Glauber's ſalts, repeated as circumſtances may require; and bathing the lower extremities in warm water will be uſeful; he may alſo take about a ſcruple of nitre twice a day, and rub behind his ears with the volatile liniment, or apply bliſters there. Gentle opiates ſhould be given at night to procure reſt.

If the pains proceed from living inſects which may have crept into the ear, the ſmoke of tobacco may be blown into it, or a ſmall quantity of olive oil dropped in; the latter will infallibly deſtroy the inſect, or oblige it to come out: hard bodies can rarely be extracted without the aſſiſtance of a ſurgeon, and then with extreme difficulty.

In caſe of ſuppuration, and when it cannot be prevented, fomentations from the ſteams of hot water, or bags filled with emollient herbs boiled, may be applied to the ear; or bladders filled with any warm liquid may be laid over them, and renewed as they grow cold; the beſt way of receiving the ſteam into the ear, is from the ſpout of a tea or coffee-pot: if the abſceſſes break, and matter is diſcharged, inject warm water and ſoap, or water and honey of roſes.

CHAP.

CHAP. XX.

Of Inflammations in the Inteſtines.

OF all the diſeaſes to which we are liable, ſcarce any is attended with greater pain or danger than that of which we now treat; yet it is frequently brought on by unpardonable neglect, either of the patient himſelf, or of thoſe who are called upon to adviſe and aſſiſt him.

It may be occaſioned by the ſame cauſes as produce other inflammations; ſuch as colds ariſing from obſtructed perſpiration, extremes of heat and cold, and ſudden changes from one to the other; expoſure to damp and moiſt air, or that of the night; or by the repulſion or ſtriking in of the puſtules in any eruptive diſeaſe.

An inflammation in the bowels may alſo proceed from hardened excrement, or other ſubſtances, ſuch as ſtones of fruit, or the like, lying in the inteſtines; from a reduplication of one inteſtine in another; from medicines of violent operation; from poiſons; and from ruptures, wounds, and other external injuries.

It is alſo called the *illiac paſſion*, the *enteritis*, and is known by ſeveral other denominations deſcriptive of the parts affected; but as the treatment is preciſely the ſame, in whatever part of the inteſtines the inflammation is ſeated, we ſhall confine ourſelves to the name which comprehends the whole inteſtinal canal, and proceed to ſpeak of the ſymptoms of *inflammations in the bowels*.

Theſe are commonly a ſhivering, and an acute burning pain in the belly, which generally fixes in the part where it is firſt perceived; in ſome caſes this pain remits and returns with additional violence, but in general it continues in an increaſing degree; the whole belly is at the ſame time affected with ſpaſmodic pains, or contractions, extending to the loins; and windy complaints are frequently extremely troubleſome.

The pulſe is ſmall, quick, and hard, the extremities grow cold, and the patient feels a ſudden and uncommon loſs of ſtrength; ſometimes a watery purging in ſmall quantities attends this diſeaſe, but in moſt caſes the muſcular fibres of the inflamed part are ſo ſtrongly contracted, that nothing can paſs through, though the patient feels frequent occaſions; and even the paſſage of the anus, or fundament, is ſo ſhrunk, that it will hardly admit a clyſter-pipe.

The windy complaints are ſometimes accompanied with nauſea, ſickneſs, reaching, and vomiting; the tongue is dry and foul; the thirſt intolerable; the urine either extremely pale or very high-coloured, and diſcharged with heat and great difficulty; the breathing is quick and obſtructed: as the ſpaſms or contractions become violent, the patient bends his body forward, and endeavours to compreſs or ſqueeze his belly together; his face is fluſhed, a delirium comes on, and his ſufferings end in convulſions.

But inflammations in the bowels frequently terminate in mortification: and in that caſe the pain goes off, and the patient apprehends himſelf relieved; but his countenance grows pale, the under-lids of his eyes become livid, the extremities are cold and clammy, yet the pulſe continues quick though ſmall, and for the moſt part irregular, fœtid ſtools are diſcharged; and in this caſe alſo, a delirium and convulſions finiſh the melancholy ſcene.

So rapid is the progreſs of this diſeaſe, that where no means are uſed to ſtop it, death frequently follows in twenty-four hours, and generally within three days from the ſeizure, ſo that there is rarely time for matter to form and ſuppurate; but ſhould that happen, the pains will abate, or rather be converted into a ſenſe of diſtenſion, and of great weight, and irregular fits of heat and cold, ſickneſs, and other ſymptoms of an internal abſceſs, will take place, whilſt the contraction of the belly will go off, and the pulſe will become leſs quick; when this abſceſs burſts the patient generally faints, and on his recovery the weight ſeems conſiderably relieved.

In this diſeaſe, when the pain does not ſeem fixed, but ſhifts to different parts of the inteſtines, if the vomiting is only occaſionally, and if the clyſters are returned downwards, hopes may be entertained of the patient's recovery.

But when the vomiting is continual; when not only what is taken down, but even the clyſters and the excrement itſelf is diſcharged at the mouth; if the patient is extremely weak, his pulſe fluttering, his countenance pale, and his breath offenſive; his caſe is extremely dangerous: and a total abatement of pain, a ſmall and irregular pulſe, cold and clammy ſweats, and black or fœtid ſtools, are certain ſigns that a mortification hath commenced, and that death will very ſpeedily follow.

The ſtricteſt care muſt be obſerved with reſpect to regimen; nothing hot or ſtimulating, either of food or liquors, ſhould be permitted; the patient's diet ſhould be ſimply water-gruel, barley-gruel, or the like; and the liquids he ſwallows, clear whey, or the infuſions or decoctions of the wild mallow, marſh mallows, liquorice, or other emollient herbs and vegetables. Cordials of every kind, wines, and ſpirits, muſt be avoided; the leaſt indiſcretion in this particular will infallibly produce fatal conſequences.

Bleeding is abſolutely neceſſary on the firſt attack, nor muſt we be deterred from this operation by the ſmallneſs of the pulſe, or the apparent weakneſs; the pulſe will riſe, and the ſtrength return, as the inflammation diminiſhes; and the bleeding muſt be repeated till the pulſe becomes ſoft, at ſuch diſtances, and taking away ſuch quantities, as the ſtrength, habit of body, and ſituation of the patient, may direct.

A bliſter ſhould be applied to the ſeat of the pain immediately after bleeding; it generally gives the patient eaſe, and not only promotes the return of the clyſters, but occaſions the medicines taken at the mouth to paſs downwards.

The frequent repetition of cooling laxative clyſters muſt by no means be omitted; oatmeal-gruel or barley-water, with a table-ſpoonful of olive oil, will anſwer the purpoſe, and ſhould be given every third or even ſecond hour till they take effect; fomentations and baths of warm water, or infuſion of camomile flowers, ſhould be applied to his belly; and the flannels may be ſprinkled with camphorated ſpirit of wine after they are wrung out; the lower extremities ſhould be repeatedly bathed in warm water, and bladders filled with it be laid over the navel, and juſt below it: if the patient's whole body can be conveniently placed in a warm bath, it may probably procure relief; but great care muſt be taken that he is not expoſed to cold in taking him out of it and returning him to his bed.

The ſmoke of tobacco conveyed into the bowels, will ſometimes procure a paſſage when all other remedies and applications fail; and this may be blown from a tobacco-pipe, or a bladder may be filled with it, and injected as a clyſter; and bladders of warm water ſhould be applied to the ſoles of the feet.

Though the contraction of the inflamed part ſeems to forbid the uſe of purges, yet when other means fail of procuring a paſſage, they muſt be tried, but opiates muſt be alſo at the ſame time adminiſtered; the common bitter purging ſalt will probably anſwer the purpoſe of opening the body, in this caſe, as well as any other medicine; two ounces of it may be diſſolved in a pint of warm water, and given in two or three ſpoonfuls at a time, according to circumſtances, till a paſſage is procured; but to prevent it's being thrown up as it is ſwallowed, twenty or twenty-five drops of the Thebaic tincture, or liquid laudanum, in ſimple cinnamon or pepper-mint water, may be given after every doſe, leſſening however the quantity of the laudanum if the diſſolved ſalts are obliged to be repeated often.

But if no liquid will ſtay on the patient's ſtomach, the following pills may be given.

> Take powdered jalap, and vitriolated tartar, of each half a dram—opium, one grain—Caſtile ſoap, enough to make pills. Form the whole into four or ſix, which muſt be taken at once, and repeated in a few hours if they do not procure ſtools.

Acids will alſo contribute to ſtop the vomiting, and give ſuch medicines as are taken at the mouth an opportunity of operating; and for this purpoſe lemon or orange-juice ſhould be mixed with whatever liquids the patient takes in.

The following draught is alſo recommended, to prevent the purging medicines from returning in caſe the vomiting is ſevere, but the uſe of it is not adviſeable till all other means fail.

> Take of emetic tartar, from one third of a grain to two thirds of a grain—of poppy ſyrup, from two drams to ſix—of ſimple mint water, two ounces.

In deſperate caſes quickſilver hath been commonly given, to the quantity of many ounces; nay, in ſome inſtances, to the weight of a pound: and if the ſtoppage is occaſioned by hardened excrement, or from any other ſolid body remaining in the inteſtines, no other remedy can be uſed ſo likely to ſucceed in removing it; but great care muſt be taken to obſerve, that no ſymptom appears by which it may be judged that a mortification hath taken place, and that ſo large a quantity is not adminiſtered as to drag down the bottom of the ſtomach, and prevent the quickſilver from getting into the bowels.

We have alſo heard of plunging the legs and feet of the patient into cold water, or of placing him upon a cold and wet pavement, and throwing water againſt his lower extremities; but as we have never ſeen the experiment tried, we cannot ſpeak of it's ſucceſs: if it hath ever been practiſed, we apprehend it muſt have been in the moment of deſpair, and when every other effort of art hath been unavailingly exerted; in ſuch ſituations it may be allowable to graſp at even the ſhadow of hope.

When inflammations of the bowels are occaſioned by ruptures, it will in moſt caſes be neceſſary to have recourſe to a ſkilful ſurgeon; but if no ſuch is at hand, the patient may be placed on a table or ſopha, with his lower parts raiſed, and his head in a declining poſture, and an attempt may be made to replace the inteſtines by the hand; but force muſt be carefully avoided, as it will increaſe the inflammation, and put the patient's life in immediate danger: ſhould theſe endeavours ſucceed in any degree, fomentations ſhould be immediately applied, and ſuch clyſters as we have before preſcribed muſt be frequently adminiſtered.

Swift as this diſeaſe is in it's progreſs to danger, the recovery from it is extremely ſlow, and for a conſiderable length of time doubtful; it is, in far the greater number of caſes, occaſioned by inattention to the very conſequential circumſtance of keeping the body open: perſons in health ſhould never ſuffer themſelves to want a ſtool twenty-four hours; by this means hard and indigeſtible ſubſtances which get into the inteſtines would be voided before they became ſurrounded with coats of fæces or hardened excrement, and formed into maſſes difficult of expulſion; and after an eſcape from the perils of this diſeaſe, it behoves us to be doubly careful in this particular, as relapſes are generally fatal, which is indeed too often the caſe in the original attack. To this care of avoiding coſtiveneſs muſt be added, every precaution againſt taking cold, which may prove equally dangerous; the patient muſt alſo regulate his diet ſtrictly, neither indulging in high or ſeaſoned food, or in heating, ſpirituous, or fermented liquors; he muſt ſhun every ſpecies of exceſs, and deſiſt from every violent exertion both of body and mind; and obſerving theſe abſolutely neceſſary rules, he may hope to regain his ſtrength, and re-eſtabliſh his health; though he muſt not forget, that having once ſuffered in this diſorder, the leaſt deviation will ſubject him to the return of all the pains and dangers of it.

CHAP. XXI.

Of Inflammation of the Stomach.

THIS diſeaſe is alſo called *gaſtritis*, and *inflammatory cholic*; and is occaſioned by nearly the ſame cauſes as the inflammation of the bowels, except thoſe of the reduplication of the inteſtines, and of the hardened fæces or excrement: it is a diſorder of the moſt acute kind, and requires the moſt powerful means of relief to be immediately employed, leſt it ſhould terminate in an abſceſs, and from thence in mortification, which will be inevitable death.

The ſymptoms are alſo, for the moſt part, ſimilar to thoſe which attend an inflammation of the inteſtines; and the ſtomach may be known to be in an inflamed ſtate by a fixed, pungent, and burning pain in it, accompanied with a throbbing, a ſenſe of diſtenſion as if it was blown up with wind, and a tumor or ſwelling; the pain is augmented by ſwallowing either liquids or ſolids, and however mild, ſoft, or eaſy of digeſtion; and whatever is taken in brings on ſickneſs or nauſea, and excites vomiting, purging, or hiccups; the breaſt and ſtomach are perpetually uneaſy; ſwallowing and drawing the breath are attended with difficulty; and coughing, ſneezing, hiccuping, or any other agitation occaſions violent pain; the pulſe is ſmall, yet quick and hard, and in ſome caſes irregular and intermitting; the extremities are cold; and clammy ſweats and fainting fits generally denote the moſt dangerous conſequences.

The ſymptoms of an *inflamed ſtomach* are ſometimes miſtaken for thoſe of a very violent heartburn, or of an inflammation of the liver; but the difference may be diſcovered by conſulting the deſcriptions of theſe complaints.

The regimen muſt be preciſely the ſame as has been directed for inflammations of the inteſtines; and the ſame care is neceſſary to avoid cordials, and whatever is of a heating or acrimonious quality; nor muſt any liquids be ſwallowed cold, or in any degree of warmth above that of milk from the cow.

The ſame method of cure which we have preſcribed for inflamed inteſtines, may be generally followed in this diſeaſe, with this difference, that the irritated ſtate of the ſtomach will ſeldom admit of adminiſtering medicines internally, and that we muſt therefore depend principally on bleeding, which muſt be governed, both as to quantity

tity of blood drawn and repetition by the pulſe, which will in general riſe after this operation, the ſtrength of the patient, and the violence of the inflammatory ſymptoms; bliſtering the part affected, which ſhould by no means be omitted; and clyſters, in which may be conveyed manna or other gentle laxatives, if the patient ſhould be coſtive: and if no ſuſtenance can be kept on his ſtomach, the clyſters may be compoſed of chicken-water, or thin chicken broth, which may help to ſupport and nouriſh him; nitre ſhould be alſo given in the clyſters, and the patient's common drink ſhould be acidulated with currant-jelly, or a ſmall quantity of nitre may be added to it.

Nor muſt we neglect to apply bladders of warm water, or fomentations of the emollient herbs to the ſtomach, and the former to the ſoles of the feet; but neither muſt be uſed too hot, or ſuffered to continue till they grow cold.

If this diſorder ſhould have proceeded from ſwallowing poiſon, or from an exceſs of eating, it may be proper to venture on a gentle emetic; but in all other caſes it is attended with extreme danger.

If the pain is violent, and the vomiting cannot be checked, it may be right to try the effect of an anodyne in ſome ſuch form as the following.

> Take of the ſolution of gum Arabic, half an ounce—of pure nitre, from five to ten grains—of water, one ounce—of ſyrup of marſhmallows, two drams—and from two to five drops of liquid laudanum.

And this draught may be repeated as the patient retains it on his ſtomach, and as circumſtances direct, at the diſtance of three, five, or ſix hours.

If an abſceſs ſhould form on the ſtomach, and burſt, a milk diet is ſtrongly recommended, with a dram or thereabouts of the genuine balſam of capivi, to be taken twice or thrice a day in a draught of the milk.

We cannot diſmiſs this chapter, without exhorting our readers to pay early attention to the attacks of this diſeaſe: taken in time it frequently admits of a cure; but after it has been ſuffered to gain ground, it is ſeldom or ever got the better of, at leaſt not without ſuppuration, which too often proves only a temporary relief, obtained too with extreme pain, and under very diſagreeable circumſtances. Nor is leſs care neceſſary in the going off of this complaint than in that of inflamed inteſtines; the reaſons for which, as well as proper rules for management, will be found in the preceding chapter.

CHAP. XXII.

Of an Inflammation of the Liver.

THE liver may be inflamed in different parts, in the membranes only, or in both the membranes and ſubſtance; and it is generally apprehended, that the inflammation commences in ſome of thoſe parts which are contiguous to the liver, and is from thence communicated to it.

This diſeaſe may not only ariſe from the common cauſes of internal inflammation, but from the antecedent ſtate of the body, or of the liver itſelf; if the former is uncommonly fat, or the latter ſchirrous or affected with hard and warty tumors, theſe circumſtances may excite inflammation, eſpecially if the liver in this ſtate has been irritated by ſtrong vomits; or it may be occaſioned by the ſtate of the blood, if it is dry or abounds with choler.

When the ſeat of inflammation is the membrane, the pain is generally acute, and reſembles in ſome meaſure that of a pleuriſy; but, when the ſubſtance of the liver is inflamed, the pain which is felt there is not at firſt violent, but increaſes gradually as the diſorder advances, ſhooting up to the top of the left ſhoulder, and ſometimes about the collar-bone, and into the throat; which latter is conſidered as a determinate ſymptom: if the attack is not accompanied with a great degree of fever, which is ſometimes the caſe for the firſt two or three days, the pulſe ſuffers but little alteration; but when the ſwelling becomes large, or when the convex part of the liver is affected, when a tumor or ſwelling is externally viſible, and occaſions a cough and difficulty of breathing, the pulſe grows quick; and in thoſe caſes the patient cannot lie on the left ſide without additional pain.

When the concave part of the liver is affected by the inflammation, in proportion as it approaches or is diſtant from the ſtomach, it brings on hiccups, ſickneſs, vomiting, and thirſt, in a greater or leſs degree of violence; if it is near the gall-duct, and prevents the paſſage of the bile into the inteſtine which is called the *duodenum*, ſymptoms of jaundice will appear; in all caſes where the liver is inflamed, the quantity of bile thrown into the duodenum is increaſed, and of conſequence all the evacuations will be bilious.

If this diſeaſe is properly treated at the beginning, it is not often mortal; but if the ſwelling cannot be diſperſed, and a ſuppuration enſues, unleſs the matter can be diſcharged externally, it proves fatal, by bringing on an incurable hectic fever.

The regimen muſt in no reſpect differ from that of other inflammatory diſorders deſcribed in the two foregoing chapters; all heating food and liquors muſt in this caſe alſo be avoided; the former ſhould conſiſt principally of light ſpoon-meat, and the latter of ſuch drinks as are cooling and diluting; and the patient ſhould, in like manner, deſiſt from all exertions which may tend to diſturb his body or mind.

From the mildneſs of the ſymptoms in the beginning of this diſeaſe, few complaints are in general made till it hath proceeded ſeveral days; if, however, it ſhould happen to be noticed in the firſt four or five days, bleeding will be neceſſary, and if this operation does not cauſe a ſpeedy abatement of the ſymptoms, it muſt be repeated; but this, as well as the quantity to be taken away, muſt be determined by the ſtrength of the patient, his habit of body, and other circumſtances, regard being had to the caution already given in treating of other inteſtinal inflammations, not to be deterred from bleeding by the ſmallneſs of the pulſe, if other ſymptoms indicate the neceſſity for it.

After bleeding, the application of a bliſter, large enough to cover the part affected, will be adviſeable, and the body ſhould be kept gently open by ſmall doſes of the tartar emetic and rhubarb in powder, or rather by an infuſion of tamarinds, Glauber's ſalts, or manna; but no violent purgatives muſt be adminiſtered: emollient clyſters will alſo be found uſeful, and bladders of water or fomentations to the ſide, as in other inflammatory caſes; to which may be added bathing the lower extremities in warm water, and applying it in bladders to the ſoles of the feet.

Nitre may be alſo added to the patient's common drink, as in the like complaint in the ſtomach or bowels; in this diſorder it may be peculiarly ſerviceable, as it tends to promote the urinary ſecretion.

When the above means fail of ſucceſs, and ſymptoms of ſuppuration become apparent, the bark has been recommended to be taken in ſubſtance three or four times a day, beginning with ſmall doſes, and increaſing till an ounce of the powder is taken in twenty-four hours.

If the abſceſs actually forms, all methods ſhould be tried to direct it to an external diſcharge, and for this purpoſe ripening poultices or cataplaſms ſhould be conſtantly applied; and if from it's being immoveable the liver appears to adhere to the *peritoneum*, or membrane which lines the whole belly, the ſuppuration may be haſtened by increaſing the quantity of the bark, even to two ounces in twenty-four hours, if the patient's ſtomach will bear it, and in thoſe caſes the abſceſs may frequently be opened externally with ſucceſs.

But though the ſame methods muſt be purſued, the like good effects can hardly be expected, if from the appearance of the ſtools it is evident that the abſceſs hath burſt, or the diſcharge from it made it's way into the cavity of the belly; in that caſe death will moſt probably enſue, unleſs the efforts of nature ſhould, as it ſometimes happens, avert this extremity of danger, by carrying off the matter in the urine or ſtools.

If, notwithſtanding all endeavours, this diſeaſe ſhould terminate in a ſchirrhous tumor or tumors on the liver, little more can be done towards the relief of the patient, than the ſame care which is required in hectic fevers, or other caſes of the ſame kind. He muſt be confined entirely to a diet of vegetables, milk, and whey; and of the former, graſs roots, endive and ſuccory are to be preferred; he muſt abſtain from animal food and ſtrong liquors, uſe very gentle exerciſe, and neither fatigue his body or agitate his mind: under ſuch regulations, though little expectation of recovery can be formed, his life may be prolonged many years, without much pain or inconvenience.

CHAP. XXIII.

Of Inflammations of the Muſcles of the Belly and of the Kidneys.

IT requires ſome obſervation to diſtinguiſh this firſt-named complaint from the inflammatory cholic, inflammations of the liver, or any of the adjacent internal parts; yet it may in general be known by it's being ſuperficial, and by an extraordinary degree of ſoreneſs over the ſurface of the belly.

Inflammation of the muſcles of the belly, is generally accompanied with more or leſs of fever, and may be occaſioned by the ſame cauſes which produce other inflammatory diſorders; by a preſſure of the belly in leaning againſt a table or the like, or by the rheumatiſm fixing in theſe parts.

If there is an apparent ſwelling and hardneſs, and a throbbing continued pain, it may be apprehended that an abſceſs is forming, which ſhould be encouraged with all ſpeed by poultices and cataplaſms, and an external diſcharge if poſſible procured; if the matter ſhould be diſcharged inwardly, it is in moſt inſtances fatal; and a tendency to mortification, which ſometimes appears, is equally to be dreaded.

To prevent a ſuppuration ſhould therefore be the great object of our care; and as this can only be done by removing the inflammation, bleeding and purging will be immediately neceſſary, together with all ſuch applications as are recommended in other external inflammations, and under the ſame management with reſpect to food and liquors.

Inflammation in the kidneys, is a diſorder happily not very frequent, but as it ſometimes occurs, we cannot wholly diſregard it.

The cauſes of this inflammation may be

wounds, bruiſes, abſceſſes, or tumors, and whatever forcibly conveys the thicker parts of the blood into the urinary ducts; ſuch as running or riding violently, exceſſive heat, extraordinary efforts of the body, or the like.

The inflammation begins with a pungent burning pain in the back, near the articulation of the ſhort ribs, but higher on the left ſide than on the right, often darting down to the bladder, and even the teſticles; the fever is more or leſs violent according to the other ſymptoms; the urine at firſt red, but it afterwards in moſt caſes becomes pale, and is diſcharged with pain, heat, and great difficulty; the ſide in ſome inſtances appears red and inflamed externally; the leg and thigh, but particularly the latter of the diſeaſed ſide, is ſeized with a numbneſs; all the pains are increaſed by any motion of the body which tends to diſturb the kidney, or to extend the parts which ſurround it; ſtanding, walking, lying on the oppoſite ſide, and every change of poſture, is diſagreeable, and the only eaſe the patient can obtain is by reclining on the ſide affected: as the diſeaſe gains ground, pains are felt in the groin; the pulſe becomes quick, ſmall, irregular, and ſometimes intermittent; and coldneſs of the extremities, clammy ſweats, ſickneſs, vomitings of bilious matter, fainting fits, ſour eructations, delirium, and convulſions, denote preſent danger.

If the complaints continue to increaſe till the ſeventh or eight day, the numbneſs of the part remaining, and the patient is then ſeized with ſhiverings or chillneſs, it may be apprehended that matter is forming in the kidney, and that the diſorder will terminate in an abſceſs.

If the matter, which in theſe caſes generally ſuppurates early, ſhould be diſcharged into the cavity of the belly, it will be attended with great danger; and even an external diſcharge of it frequently produces an ulcer, the cure of which is extremely uncertain.

This diſorder may go off, by being transferred to ſome other part of the body; or if the urine grows high-coloured, is ſecreted in large quantities, and at laſt becomes ſtill more copious, thick and mixed with matter, the patient may gradually obtain relief, and the cure be effected in this way.

This diſorder may alſo end in mortification or a ſchirrhous; if the former, it may be known by a ſudden abatement, or almoſt total remiſſion of the pain, without any diſcoverable cauſe; by cold and clammy ſweats; a low pulſe, irregular and intermitting; violent hiccups; a ſuppreſſion of urine, or a diſcharge of it in very ſmall quantities, and thoſe foul, ſeeming full of hairs, ſtinking, livid, or black, together with an almoſt univerſal deprivation of ſtrength; this unhappy caſe admits of no relief. The ſchirrhous can hardly ever be removed; but with great care, and under a ſtrict regimen, the danger is leſs immediate.

Inflammations of the kidneys require the ſame regimen, and generally the ſame treatment, as other internal inflammatory complaints.

Bleeding is neceſſary, and the repetition of it, in ſuch circumſtances, and under ſuch regulations, as in caſes of inflamed liver, bowels, or the like: emollient laxative clyſters ſhould alſo be frequently thrown up; and the patient may derive eaſe from ſitting over the ſteam of warm water, and by fomentations of emollient herbs, and bladders filled with the ſame decoction, applied externally to the part affected, and particularly if the ſkin appears inflamed.

Decoctions of parſley roots, or of linſeed, mixed with an equal quantity of the Arabic emulſion, will be proper for the patient's common drink, which may be rendered palatable, by adding a little currant-jelly, or lemon-juice and ſugar.

To make the Arabic emulſion—

Take of ſweet almonds, an ounce—of bitter almonds, a dram—of the mucilage, or jelly of gum Arabic, two ounces—of water, a quart. Blanch the almonds, and beat them in a marble mortar, adding the water and mucilage by little and little whilſt the almonds are beating.

In the diſeaſe of which we now treat, a double quantity of the mucilage of gum Arabic may be added.

If a ſuppuration ſhould take place, which may be diſcovered by the abatement of the pain, by a remaining ſenſe of weight about the parts, by ſhiverings and heats alternately, and by urine of a diſturbed appearance and whitiſh colour, the treatment muſt be ſimilar to that of the like event in the liver; and after the abſceſs has burſt, the patient ſhould drink plentifully of marſh mallows tea, or of a decoction from the roots of the ſame plant.

The following balſamics are alſo recommended after ſuppuration.

Take of white ſugar, three drams—of powdered rhubarb, one dram and half—of nitre, one dram—of Canadian balſam, one ounce and half. Make an electuary, and give a tea-ſpoonful, more or leſs according to circumſtances, three times a day.

Or, take conſerve of red roſes and white ſugar, of each three drams—of powdered rhubarb, one dram—of pure nitre, two ſcruples—of the balſam of capivi, one ounce and half—of ſyrup of marſh mallows ſufficient to form the whole into an electuary; to be taken as the laſt preſcribed medicine.

After each doſe of either of theſe electuaries, the patient may ſwallow a draught of the emulſion abovementioned.

But we are rather inclined to adviſe the uſe of the bark than theſe balſamics, and that in ſubſtance, beginning with ſmall doſes, and increaſing the quantity as the patient's ſtomach and ſtrength will admit; if the bark in ſubſtance diſagrees, a decoction muſt be ſubſtituted, though it's operation is neither ſo ſpeedy or efficacious: when this diſorder does not advance rapidly, whey, butter-milk, and the conſtant uſe of chalybeat waters, are ſaid to be beneficial.

CHAP. XXIV.

Of Inflammation of the Bladder.

THIS diſeaſe is produced by the ſame cauſes which occaſion other internal inflammations, and in a great meaſure by ſuch as bring on the like diſorder in the kidneys.

The ſymptoms are, a fever, a preſſing and burning pain in the bottom of the belly; and ſometimes, though the pain is ſeated deep, yet the ſkin about this part will aſſume an inflammatory appearance: if the neck of the bladder is affected, a retention of urine will take place, accompanied with a conſtant inclination to diſcharge it; and if the bottom of the bladder is diſeaſed, the urine will continually dribble away, though the patient will make frequent efforts to throw out larger quantities, which ſeem to be contained in the bladder: the like perpetual occaſion of going to ſtool alſo attends this diſorder; the gut ſeems loaded with hardened excrement, and ſhould it actually become ſo, the pains are augmented; the pulſe is quick and hard; the extremities cold and clammy; and as the diſorder increaſes, the uſual ſymptoms of irritation come on, ſuch as reſtleſſneſs, anxiety, ſickneſs, nauſea, vomiting, and delirium.

This diſeaſe is generally haſty in it's progreſs, and ſoon terminates in recovery or death.

In the former caſe, the diſorder may paſs off by an increaſed ſecretion of *mucus*, or that ſlimy matter which covers the membranes, from the membrane of the bladder; it may be transferred to ſome other part of the body, or a ſuppuration may take place: if the latter happens, the matter may be diſcharged into the cavity of the bladder and be carried away with the urine, or it may fall into the cavity of the belly, where it generally proves fatal; the matter may alſo be diſcharged externally through the *perinæum*, being that part which adjoins the fundament towards the fore part of the body; but theſe ulcers are extremely difficult of cure.

The regimen, as in all inflammatory diſorders, muſt be low, the food light and thin, and the drink cooling and diluting; every thing that is of an acrid or heating quality muſt be avoided, and all agitations of the mind ſhould as much as poſſible be prevented, as they tend to heat and inflame the body.

Bleeding will be neceſſary, and muſt be repeated if the ſymptoms require, and the habit of body permit it.

Relaxing medicines muſt be adminiſtered early, and repeated as often as neceſſary; for, unleſs powerful means are ſpeedily exerted, death will very ſoon render them uſeleſs.

For this purpoſe give from two to four grains of the antimonial powder, the quantity being proportioned to age, ſtrength, and other circumſtances, every two hours, waſhing it down with a ſaline draught of the common preparation.

To make the antimonial powder—

Take of emetic tartar, two grains; reduce it to a very fine powder, and mix it well with half a dram of the compound powder of crabs claws. This medicine ſhould be made in ſmall quantities at a time, as it ſpoils in keeping.

The compound powder of crabs claws is prepared as follows.

Take of the tips of crabs claws prepared (or levigated) four ounces—of prepared pearls, and red coral prepared, of each one ounce. Mix them well.

Laxative and cooling clyſters will alſo afford relief; or if, from the ſituation of the diſorder, theſe cannot be adminiſtered, gentle purges of the ſame quality, conſiſting of manna, Glauber's ſalts, decoction of tamarinds, or the like, ſhould be given, and repeated ſo as to keep the body moderately open.

In caſe of the retention of urine, decoctions of marſh mallows, and other mucilaginous herbs ſhould be uſed freely; and if, notwithſtanding the evacuations, the contraction and violent pains ſhould continue, two or three drops of liquid laudanum may be now and then added to theſe drinks, and particularly towards night.

If the inflammation ſhould appear externally, an anodyne emollient cataplaſm may be applied and covered with a bladder of warm water, which latter ſhould be renewed as it grows cold; but if there is no ſuch external appearance, it will be right to excite it by rubbing the parts about the bladder and the *perinæum* with the volatile liniment.

Fomentations and the warm bath will alſo be uſeful; the oftener the latter can be repeated, even two or three times a day, the greater will be the relief obtained from it.

It may be neceſſary to add a caution to ſuch of our readers as may be afflicted with this diſorder themſelves, or may be about other perſons who are ſo unhappy as to labour under it, againſt the indiſcriminate or unſkilful uſe of inſtruments in order to draw off the water; even the catheter muſt be introduced with abundant care; but attempts to remove imaginary obſtructions from the urinary paſſages by probes or the like, are in general productive of the moſt fatal conſequences: ſuch force always adds to the inflammation and increaſes the danger; nor are ſtrong diuretics of turpentines and ſuch other medicines much leſs pernicious.

CHAP. XXV.

Of Inflammations of the Perioſteum.

THE *external perioſteum* is the membrane which covers the bone, and ſeparates it from the fleſh; the *internal perioſteum* is the membrane which lines the cavity of the hollow bones, and ſeparates the bone from the marrow which it contains.

Beſides all the other common cauſes of inflammation in different parts of the body, it may be occaſioned in theſe membranes by the venereal diſeaſe and the ſcurvy; by the former when the internal membrane is affected, and by the latter when the external perioſteum is inflamed.

The ſymptoms that the external membrane is the ſeat of the inflammation, are a deep-ſeated pain and extreme heat, accompanied ſometimes with a pulſation or throbbing; the pain is augmented by preſſure, and every muſcular motion adds to it.

When the internal membrane is affected, preſſure occaſions no increaſe of pain, nor does the motion of the muſcles produce any diſagreeable ſenſation; but the pain continues without being aggravated or relieved by any poſition of the diſeaſed part, the pain conſtantly attending, which is like ſplitting the bone from within.

But as inflammations in both membranes proceed from nearly the ſame cauſes, ſo they produce the ſame effects with regard to the parts of the bone to which they adhere, terminating in both caſes either in abſceſs or gangrene, with this difference only, that if the internal membrane is affected and mortifies, it deſtroys the whole bone and marrow of the part.

If theſe inflammations are not very quickly removed, the bone will receive injury, and the perioſteum upon the diſeaſed part being deſtroyed, cannot be renewed till ſo much of the bone as is affected exfoliates or ſcales off; in the mean time, the parts of the fleſh which lie on it being irritated by an acrid humour, malignant and often incurable ulcers are produced, eſpecially if it happens where the bone is covered with much fleſh, and an inciſion cannot be made with ſafety.

The cure muſt be attempted by a regimen and treatment ſimilar to thoſe preſcribed in other inflammatory caſes: in this, bleeding repeatedly will be neceſſary, together with ſtronger purges than are allowable in ſuch inflammations as affect the inteſtines; and the patient ſhould live low, and drink plentifully of diluting liquors with acids.

But as a ſuppuration near the bone is greatly to be dreaded, all our endeavours, when matter is actually formed, muſt tend to draw the diſorder to the external parts; and for this purpoſe fomentations and ripening poultices muſt be applied; for the former a decoction of emollient herbs may be uſed, and for a poultice the following.

Take of the root of white lily, two ounces —figs and onions bruiſed, of each half an ounce—yellow baſilicon ointment, one

> ounce—gum galbanum, two drams—linſeed flour, as much as is neceſſary. Boil the figs and lily roots in water till the latter are tender, then bruiſe them and add to the other ingredients ſo as to make a ſoft cataplaſm of the whole: the galbanum muſt be firſt diſſolved with the yolk of an egg.

But in this and moſt other caſes where ripening or ſoftening poultices are neceſſary, bread and milk boiled ſmooth, with the addition of oil ſufficient to keep it ſoft, and if required a little raw or boiled onion cut fine, will ſave much trouble, and perhaps anſwer the purpoſes for which they are applied as effectually as thoſe which are compoſed of a much greater number of ingredients.

To make the ointment called yellow baſilicon.

> Take half a pint of olive oil—yellow wax, yellow reſin, and Burgundy pitch, of each half a pound—of common turpentine, one ounce and half. Melt the wax, reſin, and pitch, in the oil over a gentle fire, then take it off and add the turpentine, and ſtrain the whole whilſt it remains hot.

But if neither fomenting or poultices will draw the matter towards the ſurface, ſo as to admit of it's being diſcharged by means of a ſuperficial inciſion, it may be neceſſary to cut down through the fleſh to the bone, if the diſordered part is ſituated ſo as that ſuch an operation can be performed; if this cannot be attempted, amputation will be inevitable.

There are alſo various other parts of the human body, both external and internal, which are ſubject to inflammation, ſuch as the joints, the thighs, the ſpleen, the heart, the pericardium, the meſentery, and ſeveral others; but as the cauſes are principally the ſame as thoſe of which we have already treated, and the methods to be uſed for the removal of theſe diſorders nearly alike, it will be unneceſſary to dwell upon them. The firſt great attention in all inflammatory caſes is to reduce the ſymptoms by bleeding, low diet, and a free uſe of diluting liquors, avoiding every thing both of food and drink which is ſtrong or heating; and if to theſe directions be added fomentations and warm baths, as often as they can be uſed with convenience, no farther preſcriptions will be neceſſary, but what may be found in the foregoing chapters on the ſubject of different inflammations.

Inflammatory diſorders peculiar to the *female ſex*, ſuch as thoſe of the *breaſt*, the *vagina*, and the *uterus*, or *womb*, will be conſidered in that part of our work which concerns *the treatment of women in child-birth.*

CHAP. XXVI.

Of the Colic.

THIS is an appellation given indiſcriminately to all pains in the belly or gripings; but it is with greater propriety denominated differently, according to the different cauſes of it and the different circumſtances which attend it: the treatment and method of cure muſt alſo vary of courſe, and each ſpecies of the diſeaſe will therefore require to be conſidered diſtinctly.

When an obſtinate coſtiveneſs and a vomiting of bile accompanies the pain in the bowels, it is called a *bilious colic*; if it is attended with violent rumblings in the inteſtines, and eructations, it is denominated a *flatulent or windy colic*: in that ſpecies of colic which is ſaid to be *hyſteric*, the ſpirits are remarkably depreſſed, and the matter vomited up is generally greeniſh; and the *nervous colic* principally affects thoſe labourers and artificers who are expoſed to the fumes of melted metals or minerals. And this is the diſorder which has alſo taken the name of the *Devonſhire colic*, and hath been attributed to leaden veſſels, conceived to be employed in preparing cyder; a very falſe and miſtaken idea, as no ſuch are ever uſed in the management of that liquor: and this colic may alſo be properly termed the *ſpaſmodic colic*.

Perſons of weak and tender conſtitutions, thoſe who lead ſedentary lives, and ſuch as are frequently expoſed to the dangers of getting wet in the feet, are moſt liable to the colic; though it attacks perſons of all ages and habits; and the whole region of the inteſtines, or any part of it, may be the ſeat of this diſorder.

Various are the cauſes by which this diſeaſe may be occaſioned: the *bilious colic* may be produced by extraordinary agitations of the mind, by acrid and ſtimulating matter falling on the bowels, by the bile or other excrementitious matters being retained too long, or having otherwiſe loſt the qualities of health. The *flatulent or windy colic* may ariſe from obſtructed perſpiration, from hard improper food, or from new or fermented liquors. And the *nervous colic* may be cauſed, as has been already obſerved, by the fumes of metals or other poiſonous matter inhaled with the breath, or by ſolutions of them in the various veſſels which are commonly employed for the purpoſes of the kitchen; it may alſo be occaſioned from gouty matter diverted from it's original ſeat to the inteſtines, by worms, or by the obſtruction of periodical or other uſual evacuations: and this colic ſeems alſo in many inſtances to be of the bilious kind.

But from whatever cauſe this diſorder ariſes, the approach and progreſs of it are nearly alike: it begins with a dull pain, more like a ſenſe of preſſure or weight, juſt about the pit of the ſtomach; and this is attended by loſs of appetite, a pale or yellowiſh caſt of countenance, a ſickneſs or nauſea, and coſtiveneſs. As the diſeaſe proceeds, the pain increaſes gradually, is felt in different parts of the belly, but at laſt fixes about the navel, from whence it ſeems to ſhoot and dart in different directions, and wherever it is felt, leaves behind it extreme ſoreneſs; the ſickneſs at the ſtomach advances with the pain, and at length brings on a vomiting, and frequently of bilious matter; the urine is leſſened in quantity; and a *teneſmus*, or conſtant occaſion to go to ſtool, accompanies the other complaints.

In the bilious colic, the pulſe is in ſome caſes ſtrong and quick, and the appearances of heat and thirſt denote fever; the urine is ſometimes pale, and at others deep; the belly ſeems to throb and beat, and is frequently cold; the vomiting becomes by degrees ſo frequent as to be almoſt continual; quantities of hot, yellow, bitter bile, are thrown up, yet this diſcharge brings no laſting relief; and the diſeaſe frequently terminates in the illiac paſſion, or inflammation of the bowels.

The flatulent or windy colic, proceeding frequently from colds or the obſtruction of perſpiration, may be removed in general by whatever tends to reſtore it; ſuch as rubbing the legs and feet with warm flannels, or immerſing theſe extremities in warm water; the diſcharge of wind may alſo be promoted by clyſters of the common compoſition, by ſmall doſes of the tincture of rhubarb, and by frequent draughts of camomile tea, with a few drops of oil of mint in it.

When this complaint proceeds from ſomewhat improper of food or liquor, ſuch as fruit, vegetables, ſour or new malt liquor, or the like, ſome perſons recommend a dram of any good ſpirits, and others, with perhaps more propriety, a glaſs of peppermint water: the dangers of bringing on inflammatory diſorders in the inteſtines ſhould always deter us from applying ſpirituous liquors in any conſiderable quantities as remedies for this diſeaſe; we apprehend opening medicines of a compoſition tolerably warm, and external applications of warm flannels or cloths, and the bath for the legs and feet, or heated bricks applied to the latter, would in general be much more ſafe and effectual.

For the purge—

Take of the infuſion of ſenna leaves, two ounces—of tincture of ſenna, half an ounce—diſſolve in the infuſion half an ounce of Rochelle ſalts. Give one half, and if this fails to produce ſtools in two hours, let the patient take the remainder.

Or the following—

Take tincture of rhubarb and ſimple cinnamon water, of each one ounce—of the aromatic tincture, two drams. Make a draught, to be taken at once.

If the pains are ſo violent that the patient can obtain no reſt, and where the ſuppreſſion of urine is conſiderable, the following anodyne hath been recommended.

Take pure water, one ounce—oil of almonds, three drams—nutmeg water and ſyrup of marſh mallows, of each two drams—of the Thebaic tincture, or liquid laudanum, from five drops to twenty, according to circumſtances.

Perſons whoſe digeſtive powers are weak, are moſt ſubject to frequent returns of the flatulent colic; and to ſuch we would recommend the following medicine, not only as a preventive, but as a powerful and ſpeedy relief in colical pains proceeding from wind or indigeſtion: in the former caſe it may be taken to the quantity of a table-ſpoonful, either in mint water, or in an infuſion of orange-peel in common water; when the pains are violent the quantity may be ſomewhat increaſed.

Infuſe an ounce of Columbo root powdered, in a pint of good French brandy; let it ſtand ſeven days, then pour it off fine.

In the *nervous colic*, the cure ſhould begin by cleanſing the ſtomach with camomile tea; or, if neceſſary, with the aſſiſtance of a few grains of ipecacuanha.

After the ſtomach is waſhed out, opiates ſhould be given, in doſes proportioned to circumſtances, and in particular to the violence of the pain; but they muſt be repeated every two or three hours until they procure ſleep and ſome degree of eaſe: the apprehenſion that opium occaſions the palſy, which frequently ſucceeds this diſeaſe, ſeems to be erroneous.

Take of pure water, one ounce—of the Thebaic tincture, or liquid laudanum, twenty drops (more or leſs)—of ſimple ſyrup, two drams. Make a draught, to be taken immediately, and repeat it every two or three hours, as circumſtances may demand.

Or, make a pill of one grain of opium, more or leſs, according to age, ſtrength, and the ſymptoms; and repeat as before.

If the pain refuſes to yield to the laudanum ſwallowed, the following clyſter may be adminiſtered, and repeated till it gives relief.

Take of olive oil warmed, four ounces—of liquid laudanum, from thirty to forty drops.

And a plaſter of the following compoſition may be applied to the patient's belly, about the navel.

Take of *theriaca Andromachi*, and of *ſpecies aromaticæ*, of each two drams—of expreſſed oil of mace, one ſcruple. Make a plaſter.

As ſoon as the pains are abated by the uſe of opiates; gentle purges, and ſuch as operate with the ſmalleſt irritation ſhould be given; ſuch as—

Common infuſion of ſenna, one ounce—bitter purging ſalts, two drams—ſyrup of ginger, one dram and half. Make a draught, to be repeated every two hours till it takes effect.

But where caſtor oil can be procured, it is certainly preferable, both on account of the certainty of it's operation, and becauſe it will not require to be ſo frequently repeated.

Take of caſtor oil, (mixed with yolk of egg) one ounce—peppermint water, half an ounee —nutmeg water, two drams. Mix, and make a draught.

If the caſtor oil is not to be had, one dram of cream of tartar, or half a dram of precipitated ſulphur, may be given every hour or two until ſtools are procured; and when a paſſage is once obtained, laxative medicines muſt ſtill be continued till all danger is removed.

One ounce in powder of the Columbo root, infuſed a ſhort time in boiling water, ſuffering it to ſettle, and then pouring it off fine, may be of uſe to check the vomiting, and relieve the ſickneſs, in the beginning of this diſeaſe; and it is ſaid that the ſmoke of tobacco conveyed into the bowels hath occaſioned ſtools, when all other means have been tried unſucceſsfully.

The paralytic complaints which frequently remain after the removal of this colic, are in general relieved by the uſe of the Bath waters; but thoſe whoſe circumſtances and ſituation will not admit of this remedy, may uſe an embrocation, compoſed of Barbadoes tar diſſolved in rum, to rub the ſpine at leaſt twice every day; and for the like purpoſe any ſtrong ſpirits or aromatic oils may alſo be applied in the ſame manner: after this diſeaſe the bark, and exerciſe on horſeback, may be neceſſary to reſtore the patient's ſtrength, which generally ſuffers conſiderably.

In the *bilous colic*, if the pulſe is full, and the pains violent, accompanied with fever, it may be neceſſary to begin the cure by bleeding; but this muſt be directed, as well as the quantity of blood to be taken away, by the ſtrength and ſituation of the patient.

It may alſo be neceſſary to order emollient clyſters, and diluting liquors to be taken plentifully; theſe may be acidulated with lemon-juice, cream of tartar, or tamarinds; and gentle laxatives, ſuch as manna in thin chicken broth, or the like, may be frequently adminiſtered.

Warm baths are ſtrongly recommended by ſome, and by others they are thought to be rather injurious than beneficial; certain it is, that they afford temporary relief, but this ſeldom continues; and until the bowels are evacuated of the offending contents, it can hardly be expected to be laſting.

If in this colic the vomiting ſhould be violent, and other attempts to reſtrain it prove ineffectual, ſaline draughts, given in the act of efferveſcence, or during the boiling which the mixture occaſions, may be of uſe, but a few drops of liquid laudanum ſhould be added to each draught; and a plaſter of Mithridate or Venice treacle, or the leaves of garden-mint boiled in Port wine, may be applied to the pit of the ſtomach; and clyſters with Venice treacle, or from twenty to thirty drops of liquid laudanum in each, may be frequently injected.

When a paſſage hath been procured, the bowels emptied, and the pain abated, the following draught is recommended.

Take of ſimple mint water, one ounce—of ſpirituous cinnamon water, half an ounce—of freſh lemon-juice, half an ounce—ſalt of wormwood, and the cordial confection, of each a ſcruple—ſyrup of ſaffron, one dram. Make a draught, to be taken every eight hours, and add from five to twenty drops of liquid laudanum if the pains continue troubleſome.

The Bath waters, and exerciſe on horſeback,

back, are adviſed as contributary to the reſtoration of health after this diſeaſe.

The *hyſteric colic* in ſome inſtances reſembles the bilious colic, beginning with violent pains in the ſtomach, accompanied with exceſſive vomitings of yellow or green matter, and a great depreſſion of ſpirits; women, and thoſe of groſs or relaxed habits, are moſt liable to the attacks of this diſeaſe, the pain of which ſometimes goes entirely off for many days, and then returns with increaſed violence: a difficulty of breathing ſometimes attends this diſorder, and in other caſes the jaundice; which, however, ſeldom continues many days, but vaniſhes of it's own accord, and without the aſſiſtance of particular medicines.

Bleeding, purging, and all other evacuations, are ſaid to be prejudicial in this ſpecies of colic, except in caſes of very ſanguine habits, or robuſt conſtitutions, where it occaſions a conſiderable degree of fever; yet if the vomiting ſhould continue violent, it may be neceſſary to waſh out the ſtomach with whey, carduous tea, ſmall poſſet, or the like.

After the ſtomach is cleanſed, ſmall doſes of liquid laudanum may be taken in any ſimple water once every four, ſix, or eight hours, or to the quantity of twenty or twenty-five drops, to be repeated at the end of twelve hours.

Or the following—

Take half an ounce of manna, and diſſolve in two ounces of water—add of oil of almonds, half an ounce—of liquid laudanum, ten drops. Make a draught, to be repeated every ſix hours.

Aſafætida in pills is alſo recommended, and tincture of caſtor to the quantity of a tea-ſpoonful in a glaſs of the infuſion of pennyroyal.

But the uſe of opiates muſt be continued till the ſymptoms are entirely gone, increaſing the diſtances between the doſes; and after the removal of the diſorder, the ſtomach and bowels may be ſtrengthened, and the reſtoration of health compleated, by the bark and aromatic bitters, taken in proper quantities daily, the patient at the ſame time enjoying the benefit of good air, and moderate exerciſe on horſeback.

To prevent colical complaints, thoſe who are ſubject to pains in the bowels ſhould avoid as much as poſſible agitations of the ſpirits and violent exertions; ſhould be careful not to expoſe themſelves to northern blaſts of wind, or to extreme and ſudden viciſſitudes of heat and cold; they ſhould keep their feet warm and dry, or change their ſhoes and ſtockings immediately, in caſe of their accidentally becoming wet; they ſhould abſtain from windy food and ſpirituous liquors, and from all exceſs either of eating or drinking: thoſe who are by their employments ſubjected to the fumes of lead, or to the influence of any preparations from that metal, ſhould eat fat and oily food, or even take a table-ſpoonful of oil in the morning before they enter on the buſineſs of the day, with which ſome recommend the mixture of a ſmall portion of brandy, or other ſpirits; and all thoſe who have once ſuffered in either of the different colics which we have deſcribed, ſhould guard againſt returns, by taking the earlieſt precautions, keeping the body open by laxatives and emollient clyſters, applying fomentations and bladders of warm water, and bathing the legs and feet, on the firſt notice of any complaint in the bowels. In the firſt ſtages of theſe diſorders they may very frequently be removed under ſuch management, but ſuffered to proceed, they ſoon poſſeſs themſelves of the vital parts, too ſtrongly to be expelled; and we may venture to ſay, that more lives are ſacrificed to inattention and neglect in theſe diſorders, than in any other claſs of thoſe numerous maladies by which the complicated and tender frame of the human machine is liable to be diſcompoſed, diſordered, and deſtroyed.

C H A P. XXVII.

Of the Cholera Morbus, or Purging and Vomiting.

THIS diſeaſe is more frequent in autumn than any other ſeaſon of the year, and more commonly attacks young perſons than thoſe who are farther advanced in life; and thoſe of a bilious, dry, and choleric habit, are more ſubject to it than moiſt, phlegmatic, or ſanguine conſtitutions: cloſe, ſultry, hot weather, ſeems alſo to favour the approaches of this diſeaſe, which are in general extremely violent, the progreſs rapid, and the event more fatal than almoſt any other diſeaſe, the plague excepted.

It proceeds from a redundancy of the bile, overflowing in conſiderable quantities, and deſcending from the ſtomach into the bowels; and this may be occaſioned by food or liquors of unwholeſome quality, or which diſagree with the ſtomach, and in particular high ſalted, dried, or ſpiced meats, and cold, windy, or watery fruits; it may alſo proceed from particular medicines, which in ſome inſtances act as poiſons on certain conſtitutions; from actual poiſon; from eating muſhrooms, muſſels, or the like; and in ſome caſes from exceſs in the paſſions of the mind.

The ſeizure is generally ſudden, and the firſt ſymptoms are ſickneſs, heart-burn, wind, and pain and diſtenſion of the belly; theſe are ſoon followed by frequent and violent vomiting and purging of bilious matter, green, yellow, or of a blackiſh colour; violent pains and gripings now rack the bowels; the pulſe is quick and ſmall, or unequal, and the patient complains of thirſt, heat, and anxiety; cold and clammy ſweats appear, particularly in the extremities, which are alſo cramped or contracted by excruciating ſpaſms: as the diſeaſe advances, theſe contractions affect the muſcles of the belly, and even of the whole body, and the pain becomes almoſt inſupportable; perpetual though ineffectual ſtrainings to vomit, and unceaſing urgings to ſtool, bring on hiccups, a lividneſs of the nails and below the eyes, and in twenty-four hours, or even ſometimes a ſhorter ſpace, the diſeaſe terminates with life.

The firſt ſtep towards a cure, in the early part of the diſeaſe, is to waſh out the ſtomach with plentiful draughts of diluting liquors, ſuch as herb teas, whey, water-gruel, or the like; but very weak chicken broth is preferable to any other drink for this purpoſe, and at the ſame time clyſters of it ſhould be frequently adminiſtered.

To this evacuation may ſucceed a decoction of oat or wheaten bread, (though the former is ſaid to be preferable) toaſted till it is of a dark brown colour without being burnt, and boiled in water till it takes the colour of the bread; and this will in general remain on the ſtomach, and check the violence of the vomiting.

If the ſymptoms are not violent, a ſmall quantity of tartar emetic, from a quarter to half a grain, may be given in any of the drinks, and repeated after three or four hours; but this muſt be omitted where the vomiting is continual, or the patient ſtrains much. If the vomiting is moderate, from twenty to thirty grains of rhubarb may be given in a draught of any of the diluting liquors.

If the vomiting cannot be otherwiſe reſtrained, ſaline draughts may be given in the act of fermentation, to each of which may be added from five to ten drops of liquid laudanum.

But if the patient's ſtrength is not exhauſted, the vomiting and purging ſhould not be haſtily ſtopped; and therefore, unleſs faintings and other ſymptoms of extreme weakneſs appear, theſe evacuations ſhould rather be promoted, as we have before directed, than checked.

When the ſtomach is ſufficiently cleared, and, at all events, whenever the patient ſeems much weakened, the uſe of opiates will be neceſſary; which may be given in quantity from ten to twenty drops in a little ſimple mint-water, two or three times a day, or oftener, according to the urgency of the pain, or the violence of the evacuations.

Or the following draught—

Take of ſimple cinnamon water, one ounce—of ſpirituous cinnamon water, half an ounce—of liquid laudanum, from ten to twenty drops, according to age and circumſtances; to theſe ingredients may be added white ſugar, and a drop or two of oil of mint, to make it palatable.

But if the ſymptoms of weakneſs are alarming, if the pulſe is low and intermitting, if faintings occur, and the approach of convulſions is apprehended, the quantity of twenty-five or thirty drops of the liquid laudanum muſt be given in a tableſpoonful or two of the ſtrong or ſpirituous cinnamon-water, and the patient ſhould drink after it warm negus, of equal portions of generous wine and water; or ſtrong wine whey: and in this caſe it will be right to apply comfortable fomentations to the pit of the ſtomach, ſuch as flannels wrung out of camomile tea and ſprinkled with camphorated ſpirit of wine or Hungary water; and the lower extremities ſhould be firſt bathed in warm water, and then rubbed with flannels, and bladders or bottles of warm water, or heated bricks, ſhould be applied to the ſoles of the feet; and particular care ſhould be taken that the patient does not ſwallow large draughts of liquids; a tea-cupful is the largeſt quantity he ought to take at a time, but it may be repeated frequently, ſo as to convey enough into his ſtomach.

After the abatement of the ſymptoms, it will be neceſſary to continue to adminiſter the opiate, at leaſt night and morning, for ſeveral days; and the patient ſhould guard againſt a relapſe by being attentive to take nouriſhing food frequently, but in ſmall quantities at a time, and by the uſe of the bark and other bitters, which will contribute conſiderably to the re-eſtabliſhment of his health.

But a medicine yet remains to be mentioned, the free uſe of which will probably be found an effectual, ſafe, and eaſy remedy for this dangerous diſeaſe; and it is by ſo much the more valuable, as it ſeldom requires any means to be employed either for cleanſing the firſt paſſages, or promoting the diſcharge of bile previous to it's being adminiſtered: this medicine is the *Columbo root*; of which, from half a dram to two drams finely powdered, may be given in a glaſs of peppermint water at any ſtage of the diſeaſe, however early, and repeated every three or four hours, according to the ſituation of the patient and the violence of the ſymptoms; and this remedy, adminiſtered in this ſimple way, hath been often known to afford relief, when the efforts of art, exerted in much more elaborate preſcriptions, have totally failed of ſucceſs.

In the treatment of this diſeaſe it will be always right to enquire, if the cauſe can be readily aſſigned; becauſe in ſome caſes, where the occaſion can be aſcertained, remedies ſuited to it may be immediately applied, which may in ſome meaſure differ from thoſe which are directed under a general conſideration of the diſorder: thus, if it hath proceeded from poiſon, proper directions will be found under that head; if it has been produced by violent purgatives or emetics, Venice treacle and other warm opiates may be proper to be given internally, and liniments of a ſtrengthening, oily compoſition, may be required to be rubbed over the ſtomach and belly; if it has been brought on by fermenting or corrupted food, evacuations of vomiting procured by a few draughts of warm water, and a gentle laxative, will in general prove effectual to remove it; and if violent exceſſes of the paſſion of anger have occaſioned it, emetics and purgatives muſt be avoided, and in that caſe abſorbents with nitre, water-gruel, decoction of the ſhavings of hartſhorn, and the like, will be the proper liquids to dilute; after the uſe of which it may be right to give a few grains of ipecacuanha, and a ſmall doſe of manna and rhubarb.

CHAP. XXVIII.

Of a Diarrhœa, or Looſeneſs.

WHEN the ſtrength of the patient is but little affected by a *diarrhœa*, or *violent looſeneſs*, it may generally be looked upon rather as a ſalutary evacuation than a diſeaſe; and it ought never to be ſuddenly checked or ſtopped by medicine, unleſs it continues ſo long as to bring on a conſiderable degree of weakneſs, or to threaten a more dangerous diſorder in conſequence of it.

This diſeaſe proceeds from irritation in the inteſtines, and the cauſes of this preternatural irritation are numerous: the moſt common are, an ill judged and profuſe uſe of purgatives; too great acidity, or a diſpoſition to putridity in the aliment; acrid bile; exceſs of eating or drinking; obſtruction of any cuſtomary evacuation, of perſpiration, or the like; exceſſive paſſions; matter ſecreted from abſceſſes and carried to the inteſtines; worms; putrid vapours or exhalations; or a tranſlation of the matter of other diſeaſes to the inteſtines.

The ſymptoms are merely the copious diſcharges by ſtool; all others which attend this diſeaſe may either be conſidered as accidental, or as actually joined with and making a part of the diſorder; the loſs of appetite and ſtrength are conſequences of the exceſſive evacuation.

The diſcharges are various in different patients, and in the ſame patient at different times; if there is a defluxion of watery humours, the looſeneſs is more troubleſome by night than in the day, and particularly after ſleep; if the diſorder originates in the ſtomach, the diſcharge is ſlimy and chiefly made in the day; when an offenſive bile is too copiouſly emptied into the inteſtines, the ſtools are more frequent by night: in ſome very violent caſes pieces of ſkin appear in the ſtools, reſembling the coats of the inteſtines; theſe are parts of the outer ſkin which lines the *rectum* or ſtrait gut, which in this diſeaſe is ſeparated and thickened, and then thrown out of the body.

Fevers ſometimes terminate in diarrhœas, and if they abate in a day or two produce ſalutary effects; but a continuance frequently proves fatal: and when a looſeneſs remits and returns, and is accompanied with ſymptoms of fever, it is always troubleſome and often dangerous; a total loſs of appetite, and violent hiccups are alſo diſagreeable ſymptoms; and if the diſcharges become exceedingly copious and frequent, faintings and other ſigns of debility will occur. If a vomiting comes on ſpontaneouſly after a purging of long continuance, it generally proves a cure;

and acid eructations or breaking of wind, which do not accompany the diſorder from the beginning, but commence afterwards, are favourable indications; as are alſo a moiſt ſkin, and a ſediment in the urine.

Preparations of rice with proper quantities of cinnamon, and of ſago with Port wine, will be the proper diet in this diſeaſe; and the common drink may be the white decoction, camomile tea, rice gruel, or thin broth made from lean veal, or a ſheep's head, taking off the fat carefully after it has boiled; theſe broths have more of jelly in them than thoſe which are made from other animal fleſh.

When this diſeaſe is unattended with violent ſymptoms, or with any fever or conſiderable degree of pain, the ſtomach may be cleanſed with a few grains of ipecacuanha, or a ſmall quantity of the emetic wine; and a ſmall doſe of tincture of rhubarb taken immediately afterwards will generally remove the complaint.

If the diſorder is occaſioned by obſtructed perſpiration, the ſame methods muſt be uſed as in other diſeaſes ariſing from the ſame cauſe; the patient muſt live low, drink freely of diluting liquors, bathe the legs and feet in warm water, and rub them with flannels; it will alſo be right to promote perſpiration by ſuch ſmall doſes of ipecacuanha as may not bring on ſickneſs and vomiting, and for this purpoſe grown perſons may take two or three grains in powder, and repeat it at the diſtance of four or ſix hours, as occaſion may require; and the quantity for children muſt be proportioned to their age, or to the latter it may be adminiſtered in clyſters, repeated at like diſtances if neceſſary.

If the diſcharge ſhould be ſo exceſſive as to occaſion the pulſe to fail, it will be neceſſary to adminiſter opiates; but we can by no means adviſe the giving them till loſs of ſtrength and increaſing weakneſs, render it dangerous to permit the continuance of the evacuation. In that caſe—

Take rhubarb in powder, and diaſcordium, of each one ſcruple—of oil of cinnamon, one drop. Make a bolus, to be taken at going to reſt.

Or the following draught.

Take of tincture of rhubarb prepared with wine, one ounce—of rhubarb powdered, half a ſcruple—of liquid laudanum, from five to ten drops. Make a draught, to be taken as above.

To make the tincture of rhubarb.

Take of rhubarb in powder, one ounce and half—infuſe it ſix days in a pint of brandy. Let it ſtand in a moderate heat, then pour or ſtrain it off fine; two drams of the leſſer cardimum ſeeds added to the infuſion will render it more palatable, and gently warm the ſtomach and bowels. The like quantity of rhubarb and cardimum ſeeds may be infuſed in wine, with the addition of a glaſs of brandy; but this will require a leſs degree of heat than the former.

When this diſorder ariſes from the paſſions of the mind, the cure will be found difficult; the anxiety and reſtleſſneſs which are occaſioned by grief, anger, or the like, are checks to perſpiration, and powerfully counteract all means which are uſed to excite it; in this caſe vomits and purges will be equally improper, and opiates and other antiſpaſmodics muſt be principally relied on; liquid laudanum in ſmall doſes of from ſix to twelve drops each may be taken twice a day, in a tea-cupful of the infuſion of valerian or pennyroyal; and the patient's mind ſhould be ſoothed and diverted as much as poſſible; it will be right alſo to keep the feet warm in flannels, or thick woollen ſtockings.

If the diarrhœa ſhould be occaſioned by the ſtoppage of uſual evacuations, all endeavours ſhould be uſed to reſtore them; or where that cannot be done, it may be proper to bleed and ſubſtitute others: and no time muſt be loſt in taking theſe ſteps, as ſuch a caſe will ſoon become extremely dangerous.

When this diſorder proceeds from repletion or exceſs in eating or drinking, firſt empty the ſtomach with a vomit excited by ipecacuanha, to the quantity of a ſcruple or half a dram for a grown perſon; and at the diſtance of forty-eight hours, give a like quantity of rhubarb in powder, or three table-ſpoonfuls of the vinous tincture of rhubarb; and if the looſeneſs continues, repeat the ſame courſe, keeping the patient to a light diet and diluting liquors.

Habitual diarrhœas, or thoſe of very long continuance, muſt be treated with great caution: moderate exerciſe on horſeback, or rather in a carriage, ſtrengthens the bowels; and doſes of the powder of ipecacuanha, ſo ſmall as not to act emetically, with aromatics and the chalybeat waters, together with diuretics in ſome caſes, will, if perſiſted in, effect a cure.

When the *teneſmus* or urging to ſtool is extremely troubleſome, the following clyſter is recommended.

> Take of ſtarch boiled to a jelly, from four to ſix ounces—beſt French brandy, from half an ounce to an ounce—and from twenty to thirty drops of liquid laudanum. The quantities muſt be proportioned to age and other circumſtances. Two drams of ſtarch will make ſix ounces of jelly.

A looſeneſs which proceeds from ſubſtances of an acrid nature or poiſonous quality muſt be promoted, and vomiting excited, by giving the patient conſiderable quantities of fat broths or other oily liquids; and if ſymptoms appear from which it may be apprehended that the inteſtines are inflamed, it may be neceſſary to bleed, and adminiſter ſmall doſes of laudanum to allay the irritation.

When a diarrhœa is occaſioned by acrid bile, ſmall quantities of nitre given with the other medicines will reſtrain the diſcharges; and when it is the conſequence of gouty or ſcorbutic matter, repelled from the extremities or other parts of the body, and thrown on the inteſtines, ſmall doſes of rhubarb or manna will be neceſſary; and endeavours ſhould be uſed to remove the cauſe to a leſs dangerous ſituation, and to invite the gout to the extremities by fomentations, bathing them in warm water, and applying warm poultices to the ſoles of the feet; and this end will alſo be ſooner attained by exciting perſpiration with warm diluting liquors.

Diarrhœas which attack women in childbed are at all times alarming, and after they have continued a day or two become extremely dangerous; a clyſter of ſtarch jelly and a few drops of liquid laudanum ſhould be thrown up, and a tea-cupful of the infuſion of Columbo root, made in boiling water, ſhould be adminiſtered after every ſtool: this medicine, as well as the ipecacuanha, is ſafe and effectual, whether the diſorder is attended with a fever or not; and may alſo be given in the early ſtages of it, when aſtringents might be prejudicial.

Infants who do not ſuck are frequently ſubject to watery ſtools attended with gripes, in which caſes the diſcharges are alſo ſometimes green and fœtid, and denote approaching convulſions; when this happens, no time ſhould be loſt in procuring a breaſt for the infant, and three, four, or five drops of the antimonial wine, ſhould be given to excite vomiting every four, ſix, or twelve hours, until an amendment appears, both in the colour and conſiſtence of the ſtools; whilſt they continue greeniſh, the following mixture will alſo be uſeful.

> Take of the Columbo root powdered, from one ſcruple to one dram—of magneſia, from two ſcruples to two drams—of ſimple mint water, four ounces.

Give a tea-ſpoonful of this mixture every ſecond, fourth, or ſixth hour, according to circumſtances; and the ſame medicine will be found equally ſalutary in the diarrhœa which frequently attends the cutting teeth.

Diarrhœas occaſioned by worms, can only be ſtopped with ſafety by removing the immediate cauſe; all attempts to check them, till medicines have been adminiſtered to deſtroy the worms, will not only prove ineffectual but dangerous: after this has been done, the bowels may be ſtrengthened, and a return of the diſeaſe prevented by ſmall doſes of rhubarb, and drinking lime-water in the quantity of half a pint in the twenty-four hours, divided into two draughts, one to be taken before noon, and the other towards the evening.

If flatulencies and windy eructations accompany this diſeaſe in ſuch a degree as to be very troubleſome, the following medicine may give relief.

Take of extract of logwood, one ſcruple—of the powder of *cortex thuris* or *elutheria*, ten grains. Make a bolus with ſimple ſyrup.

Aſtringent medicines are only to be given when, from the exceſs of the diſcharges, the patient's life is in actual danger; and where theſe muſt be admitted, the preparations of logwood are preferable to moſt others.

To make the decoction of logwood—

Boil three ounces of powdered logwood in two quarts of water till it is reduced to one; towards the end of the boiling add two drams of cinnamon. Let the whole boil together a few minutes; ſtrain or pour off the decoction fine when it is cold.

Two or three ounces of this decoction may be taken, one, two, or three times a day, according to the frequency of the evacuations, which it will tinge ſo much as to make both ſtool and urine appear like blood; it is a mild aſtringent, and hath this advantage over moſt others, that it will not be injurious, even though the diſorder ſhould be attended by a degree of fever.

The extract may be made as follows.

Boil a quarter of a pound of logwood, finely powdered, in one quart of water, till it is reduced to a pint. Let it ſtand till the powder ſubſides, then pour off the liquor fine, and adding another quart of water to the powder, boil it again till one half is conſumed; and this alſo muſt be poured off, and the ſame proceſs repeated a third and fourth time: then throw the ſeveral liquors together, mix them well, ſtrain them, and boil again till the whole is of a proper conſiſtence.

An extract of logwood may alſo be made, by firſt covering the powder with rectified ſpirit of wine, and letting it digeſt before it is boiled in the water, and afterwards adding the ſpirituous extract to the watery, being firſt evaporated to the thickneſs of honey, and boiling both together to a proper conſiſtence.

The means of preventing this diſeaſe, are generally temperance, choice and care in the articles of food and liquor, and attention to avoid all expoſures to the danger of obſtructed perſpiration: thoſe who are ſubject to it, under particular circumſtances, will guard againſt it by abſtaining from whatever occaſions the irritation which brings it on; and few men are ſo regardleſs of the ineſtimable bleſſing of health, as not to obſerve when any thing particular uſually offends the ſtomach, or produces indiſpoſition or diſeaſe.

CHAP. XXIX.

Of the Bloody Flux, or Dyſentery.

THIS diſeaſe prevails moſt in the ſpring and autumn, and more in the latter than the former; and thoſe are moſt ſubject to it who are full of blood, of bilious habits, or who lead irregular lives; and thoſe who are expoſed to damps and night air, or are confined to cloſe and unwholeſome places: hence it frequently rages in camps, and ſpreads in gaols, priſons, and hoſpitals.

It will therefore appear, that whatever obſtructs perſpiration may occaſion this diſorder, and as the bowels are more or leſs weak, nature ſeeks relief in diſcharges from them, and the conſtitution is racked in proportion. Putrid air offends the bowels and irritates them to immoderate evacuations; nor is putrid aliment of any kind leſs pernicious: fruit, fermented liquors, and all high and ſpicy food may alſo bring it on; but it is more commonly communicated by infection, being contagious in a very high degree.

This diſeaſe may alſo be deſcribed under three different denominations, according to the different appearances; the *inflammatory*, the *putrid*, and the *malignant*.

The ſymptoms of the *inflammatory dyſentery*, are a violent fever; a hard pulſe, which in this ſpecies of the diſorder, contrary to what happens in the other kinds, ſoon becomes full, and continues ſo during the whole progreſs of the diſeaſe, and even in the decline of it; an unceaſing and almoſt inſupportable pain in the belly, which is augmented by the part being touched, and is ſtill more violent after vomiting or reaching; the ſtools frequent but inconſiderable in quantity, ſometimes ſtreaked with blood, at others almoſt wholly blood, and in ſome inſtances matter only without any bloody appearances; a violent headach; fluſhes, or a ſettled red in the face; and, in ſome caſes, a ſwelling or diſtention of the belly.

The *putrid dyſentery* is diſcovered by not being attended by any fever, or but in a very ſlight degree; a bitterneſs in the mouth which denotes the firſt attack; a diſcharge of bilious matter by vomit, among which worms are frequently thrown up; the patient's countenance is of a dead pale; he has repeated ſhiverings in the whole courſe of the diſorder; and his ſtools are of various colours, but moſtly ſtreaked or mixed with blood.

In the beginning of a *malignant dyſentery*, or when any of the other kinds degenerate into it, the patient complains of ſudden weakneſs, great anxiety about the pit of the ſtomach, and heavineſs in the head; his aſpect is dull, oppreſſed, and deadly; his voice becomes weak; he is frequently ſeized with faintings, and ſometimes with ſlight convulſions; milliary eruptions appear in ſome caſes, and in others diſcoloured ſpots and blotches; and theſe ſymptoms are accompanied by a very weak pulſe, and conſtant complaints of ſickneſs in the ſtomach.

Theſe are diſtinguiſhing ſigns of the different appearances of this diſeaſe; but there are alſo general ſymptoms which for the moſt part occur, whatever be the particular nature of the diſorder.

Theſe are conſtant and violent griping pains in the belly; a perpetual inclination to go to ſtool; a painful deſcent as it were of the bowels following every evacuation; the diſcharges at firſt of greaſy or frothy mucus or ſlimy matter, with now and then an excrementitious ſtool intervening without any conſiderable pain: as the diſeaſe advances, the diſcharges begin to be ſtreaked with blood, and at length aſſume the appearance of pure blood; ſuch bits of ſkin as are deſcribed in the foregoing chapter are frequently perceived in them, and a part of the inteſtine is ſometimes actually forced out at the fundament, occaſioning great pain and uneaſineſs; the patient is alſo exceedingly troubled with wind in the ſtomach and violent eructations.

This diſeaſe may be diſtinguiſhed from other fluxes by the pain in the bowels being much more acute, by it's not being accompanied with conſtant vomiting, and by the bloody appearance of the evacuations.

This diſorder is always attended with danger; the degree of it may be taken from the violence of the ſymptoms, the ſtrength of the patient, and the continuance of the diſorder: but it ought never to be diſregarded, for nature ſeldom contributes to the cure, (except in infancy) and until the diſeaſe gives way, a mortification of the bowels is always to be apprehended.

If the excrements are of various colours and very offenſive, it is probable that the inteſtines are ulcerated; a caſe of extreme danger: the appearance of blood or other token of irritation in the firſt ſtages of the diſeaſe is unfavourable; when it has been taken by infection, and is attended with urgent fever, or hath been preceded or is accompanied by any other diſorder, the danger is enhanced proportionably; if the excrement paſſes away involuntarily, if clyſters are immediately returned, or if the paſſage is ſo ſtopped as to prevent their being thrown up, little hope can be entertained; and a feeble pulſe, difficulty of ſwallowing, convulſions, coldneſs of the extremities, and vomiting with hiccups, are mortal ſymptoms.

In the cure of a diſeaſe which requires more care and ſkill than moſt others, and which is always attended with a certain degree of danger, cautions which may enable us to prevent, are nearly as valuable as preſcriptions for the cure. In warmer climates, and even in this, the cold and chilling evening dews, which frequently ſucceed hot and ſultry days, ſhould be carefully avoided; thoſe who are in camps ſhould be attentive to cover excrement as ſoon as it is diſcharged, and thoſe who are unhappily confined in priſons and gaols, ſhould endeavour to get every thing of the kind removed from their places of confinement as ſpeedily as poſſible. When this diſorder is prevalent, the bark may be taken at leaſt once every day as a preventive; and upon any ſymptom of it's approach, an emetic, and a ſweat excited by warm diluting liquors, and followed by ſuch a doſe of rhubarb as may gently open the body, may probably ſtop it's farther progreſs.

The firſt great article of regimen in this dangerous diſeaſe, is an attention to cleanlineſs; it is not only of the firſt importance to the patient himſelf, but it is abſolutely neceſſary to the ſafety of thoſe who are about him; every thing the patient wears or uſes ſhould be frequently changed, and neither the excrement, the foul linen, or even the urine, ſhould be permitted to remain in the apartment of the ſick a ſingle moment; the air of the chamber ſhould be kept moderately warm, but as pure as poſſible, by admitting freſh air into it frequently under proper precautions, and by the fumes of hot vinegar, ſprinkling the floor and furniture with other acids, and burning lavender flowers, myrrh, and other aromatics.

The diet may be of rice, ſalop, panada, ſago, and broth made from lean animal fleſh, and in particular of veal or calves feet; jellies alſo of animal ſubſtances with cinnamon; and the following preparation is recommended by modern writers as admirably calculated not only for food, but to be adminiſtered in clyſters.

Take a pound or two of the fineſt wheat flour, and tie it as tight as poſſible in a linen cloth; then dip it in water, and duſt it over with flour, and repeat this operation till a coat or cruſt is formed outſide the cloth, which will prevent the water from penetrating; in this ſtate put it into a pot of boiling water, and let it boil ſix or eight hours, till it becomes a hard dry maſs: of this two or three ſpoonfuls may be grated and boiled in new milk and water to the thickneſs of pap, and eaten with ſugar ſufficient to make it palatable.

Nor muſt we omit to mention broth, made of what is called in the north of Britain a *ſinged head*; being a ſheep's head with the ſkin on, and from which the wool hath been burnt or ſinged off with hot irons: the head is directed to be boiled till the broth will jelly, and this is recommended by ſome, not only as proper food for ſuch as labour under this diſeaſe, but as a ſovereign remedy for the cure of it. Cinnamon or mace may be added in the boiling to render the taſte more agreeable, and the feet may be uſed as well as the head, being prepared in the ſame manner.

If the diſeaſe is of the putrid kind, not only the patient's food and liquors may be acidulated, but he may be freely indulged in the uſe of ripe fruits, particularly ſtrawberries and currants; nor will preſerved fruits or jellies of fruit be in the ſmalleſt degree prejudicial.

The proper drinks in this diſeaſe are various preparations of milk, either in whey, butter-milk, or mixed with water; a decoction of the common mallows in milk and water, or the white decoction; alſo water wherein toaſted bread hath been boiled, or a hot iron quenched; water-gruel or camomile tea may alſo be drank occaſionally; and, wherever a putrid tendency appears, all theſe drinks ſhould be acidulated with cream of tartar, tamarinds, or jelly of fruits.

If the degree of fever be conſiderable, and a full, ſtrong, and hard pulſe, indicates a tendency to inflammation, bleeding may be neceſſary; but unleſs the inflammatory ſymptoms are manifeſt, this operation is by no means adviſeable.

Immediately after bleeding, or in caſe that ſhould not be neceſſary, it will be right to cleanſe the firſt paſſages by a few grains of ipecacuanha, which may be worked off with camomile tea in moderate quantities; after this the bowels ſhould be kept open with mild laxatives, ſuch as rhubarb, caſtor oil, or the like; in the inflammatory kind ſmall doſes of tartar emetic are alſo proper, though ſome recommend a repetition of the ipecacuanha in ſmall quantities for ſome time.

If the patient ſhould be of a choleric or bilious habit, and eſpecially if the heat and thirſt ſhould be conſiderable, the following bolus may be uſeful.

Take of nitre, five grains—of ipecacuanha powdered, three grains—of theriaca Andromachi, one ſcruple—of Locatelli's balſam, enough to make a bolus.

In every ſpecies of this diſorder, the promotion of perſpiration will contribute conſiderably to the cure; and in the beginning of this diſeaſe it is ſo beneficial, that exciting it by drinking plentifully of diluting drinks will ſometimes render other medicine unneceſſary: in the malignant kind of dyſentery this evacuation is ſo neceſſary, that endeavours muſt be uſed to bring it on by cordials, as well as by a vapour bath, or by wrapping the legs and thighs in flannels, which have been wrung out of warm water; and in this caſe the bolus above preſcribed may alſo be adminiſtered.

The following medicines are alſo recommended after the ſtomach hath been waſhed out.

Take of rhubarb dried by the fire and powdered, one ſcruple—of diaſcordium, half a ſcruple—of opium, half a grain—oil of cinnamon, one drop—ſimple ſyrup, enough to form a bolus, which may be taken immediately after the operation of the emetic.

Take of the chalk julep, one ounce and half—of mithridate, one ſcruple. Make a draught, to be taken every fourth hour.

If, from the violence and continuance of the evacuations, the patient's ſtrength ſhould fail, aſtringents may be neceſſary; among theſe Guiana bark is ſaid to act without the uſual inconveniencies commonly attending the uſe of theſe medicines. The decoction of it, made in the following manner, may be taken in the quantity of two ounces, or leſs, according to age and circumſtances, twice or thrice a day.

Boil two drams of Guiana bark bruiſed, in one pint and a quarter of water, till it is reduced to a pint. Let it ſtand to ſubſide, and then pour or ſtrain it off fine.

Logwood is alſo efficacious in the removal of this complaint, and the following method of adminiſtering it hath been adviſed.

Take of the extract of logwood, two drams. Make twenty pills, three or four of which may be taken every fourth or ſixth hour, and waſhed down with a draught of the decoction of Guiana bark, in the quantity preſcribed above.

The confection of Japan earth is alſo recommended, of which the following is the compoſition.

Take of Japan earth, one ounce and half—tormentil root, nutmeg, and frankincenſe, of each one ounce—opium diſſolved in white-wine, two ſcruples—ſimple ſyrup and conſerve of roſes, of each ſeven ounces. Make an electuary.

Of this let the patient take from a ſcruple to a dram, according to age, ſtrength, and ſymptoms, three or four times a day, drinking after it a draught of the decoction above preſcribed, or of the decoction of Columbo root, which is alſo uſeful in this diſeaſe.

Starch clyſters, or thoſe of fat broth, with from twenty to forty drops of liquid laudanum, may be frequently adminiſtered, which may give relief when the teneſmus or inclination to ſtool is particularly troubleſome.

The following electuary is alſo recommended.

Take ſpermaceti and yellow wax, of each two drams—compound powder of gum tragacinth and diaſcordium, of each one dram—of ſyrup of poppies, ſufficient to make an electuary. The quantity of a nutmeg to be taken twice a day.

After the removal of this diſorder, the patient muſt continue his care as to diet and liquors, avoiding high, hard, and ſeaſoned animal food, and ſpirituous, malt, and other fermented liquors; for common drink the decoction of toaſted bread will be proper, and this may have the addition of a moderate quantity of wine, or a glaſs or two of generous wine may now and then be taken without mixture.

Air and gentle exerciſe, but not to fatigue, will alſo contribute to the patient's recovery; and ſmall quantities of the Peruvian bark are alſo adviſed to reſtore the tone of the inteſtines after the abatement of this diſeaſe; though ſome are of opinion, that the *cortex thuris*, or *elutheria*, is in this caſe to be preferred for that purpoſe; and others recommend infuſions of bitters in wine or brandy; and lime water and milk, in equal quantities, to be taken twice a day.

To make ſtomachic bitters.

Take gentian root ſliced, and freſh lemon peel, of each half an ounce—of dried orange peels, half an ounce—of the leſſer cardimum ſeeds bruiſed, one dram. Infuſe the whole ten days in a pint of French brandy, letting it ſtand near the fire, and ſhaking the bottle frequently: ſtrain or pour it off fine.

From a tea-ſpoonful to a table-ſpoonful may be taken, once or twice a day, in a ſmall glaſs of good white wine.

It may be neceſſary to add, that the *vitrum antimonii ceratum*, or *cerated glaſs of antimony*, and a gentle opiate after it, hath been held by ſome to be a ſpecific in this diſeaſe; it is directed to be taken in quantities from two grains to ten, in proportion to the ſituation of the patient, two or three times a day, or even oftener if the ſtomach doth not reject it.

CHAP. XXX.

Of the Coeliac Paſſion and Lientery.

BOTH theſe diſeaſes are diarrhœas or fluxes of the belly, and both ſeem to proceed from nearly the ſame cauſes, though the appearances are different.

In the former the aliment is carried off in a liquid ſtate, but not well digeſted, and the diſcharges reſemble chyle.

In the latter diſorder the aliment is hurried through the body in a ſtate wholly or nearly indigeſted; and in both caſes the patient, if not relieved, ſinks into a waſting and irrecoverable weakneſs, and periſhes for want of a ſupply of juices.

Both theſe diſeaſes proceed from relaxation of the inteſtines and ſtomach; or they may be cauſed by obſtructions of the inteſtinal glands, which do not therefore ſupply a ſufficient quantity of that fluid which is neceſſary for diluting the chyle, and rendering it fit to paſs into the lacteal or abſorbent veſſels of the inteſtines, by which means it paſſes off in the excrement.

When theſe diſorders ſucceed other fluxes, and in particular dyſenteries, they are attended with great danger, and frequently end in the patient's death: broken conſtitutions, perſons of advanced ages, and infants, are alſo liable to ſuffer very ſeverely in them; and if they are attended with heat and thirſt, the difficulty of cure will be increaſed.

The ſymptoms differ only in the circumſtances already mentioned from thoſe of diarrhœas or other fluxes, and as they proceed in ſome meaſure from an interception of the humours accuſtomed to be diſcharged from the glands in the firſt paſſages, aſtringents are prejudicial; and thoſe medicines which gently irritate the bowels and cleanſe the mouths of their glands, are manifeſtly beſt calculated to give relief; for this purpoſe vomits of ipecacuanha ſhould be given, and the operation of them ſucceeded by ſmall doſes of rhubarb or other laxatives: and this treatment, with a due regard to regimen in diet and liquors, which muſt be conformable to the directions given in diarrhœas, will, if properly purſued, in general remove theſe diſorders.

But as indigeſtion or weakneſs of the ſtomach contributes to produce theſe diſeaſes, ſo the Jeſuits or the Guiana bark and ſtomachic bitters will be proper reſtoratives and ſtrengtheners; and if any pain or extraordinary degree of ſoreneſs ſhould remain, ſmall doſes of opiates will aſſiſt in carrying off thoſe complaints.

CHAP. XXXI.

Of the Diabetes.

THIS is a diſeaſe, in which whatever is drank ſuddenly paſſes off in a crude ſtate, and with very little change from that in which it was ſwallowed; or in other words, it is a diſcharge of urine exceeding the quantity drank, and going off ſo quickly, as not to admit of it's being properly digeſted.

Youth are very little ſubject to this diſorder; thoſe who are in the decline of life are moſt liable to it; and in particular thoſe who have been accuſtomed to a liberal uſe of wine or other ſtrong liquors, and thoſe who have paſſed their lives in hard labour or violent exertions.

The cauſes are generally ſaid to be a relaxation of the ducts or paſſages from the kidneys, too great a thinneſs of the fluids, or obſtructed perſpiration; and theſe may be the effects of violent diſeaſes, exceſſive evacuations, ſtrains, extreme hard labour, or violent and ſtimulating medicines; but it may probably in many inſtances be owing to a defect of vital heat, to a thin or diſſolved ſtate of the blood, or to a concurrence of accidental circumſtances driving too large a quantity of it to the urinary paſſages.

The ſymptoms of this diſeaſe are a frequent and too copious diſcharge of urine, or of apparent urine, which is generally inſipid, but has ſometimes a taſte of ſweetneſs, and ſmells agreeably; this diſcharge is accompanied with an hectic heat, thirſt, a weak but quick pulſe, loſs of appetite, and waſting of the fleſh till the patient is reduced to ſkin and bone. This diſeaſe is ſlow in it's approach, in the beginning the mouth is dry, the ſpittle white and frothy, and an unuſual heat is felt in the bowels; after it has proceeded ſome time, a kind of dropſical ſwelling is no uncommon ſymptom. If by any accident the urinous diſcharge is checked ſuddenly, the loins and parts adjacent, as well as the legs and feet, ſwell; what urine paſſes is brought off with conſiderable pain and difficulty; at length a total ſuppreſſion takes place, and death enſues. The ſweetneſs of the urine is not a conſtant ſymptom; it ſeldom attends till the patient's caſe becomes dangerous, and is probably occaſioned by the chyle paſſing into it in an unaltered ſtate, as the ſame obſervation may be made on the expectorated matter in the laſt ſtage of a conſumption ariſing from the like cauſe.

When this diſorder is taken in the beginning, and the conſtitution of the patient is tolerably ſound, a cure is ſometimes effected; but if it be of long ſtanding, or the habit is ſhattered or debilitated, little hope of relief can be entertained.

The diet ſhould be nearly the ſame as in conſumptions or hectic fevers; broth, or rather tea, of lean animal fleſh, ſhell fiſh of moſt ſorts, jellies, ſago, and ſalop with milk; all theſe ſhould be taken in ſmall quantities at a time, as well as the patient's drink, which ſhould be barley-water with comfrey root boiled in it, and lime-water mixed with an equal quantity of milk; the Briſtol water has alſo been highly recommended, though ſome prefer the lime-water, newly made and drank as often as the patient's thirſt requires it with milk, and others adviſe allum whey as a ſpecific, and direct half a pint of it to be taken night and morning. To make the allum whey—

> Boil one dram of allum in a pint and half of milk till the curd ſeparates, then take away the curd with a ſpoon. Let the whey ſtand till it ſettles, and pour it off fine.

Acids of fruits are alſo recommended to quench the partient's thirſt, and barberries or other acid fruits preſerved; and raiſins with biſcuit may conſtitute a very wholeſome part of the patient's food.

Moderate exerciſe on horſeback, but not to fatigue, will be uſeful; and rubbing the patient's body all over with flannels or a fleſh-bruſh aſſiſts perſpiration, which peculiarly tends to divert the diſcharge through the kidnies.

The patient ſhould alſo wear a flannel ſhirt next his ſkin to promote a diſcharge by perſpiration, and his loins ſhould be ſupported by a ſtrengthening plaſter, or a broad girdle or other bandage round the lower part of his belly.

If medicine is neceſſary, the courſe ſhould begin with gentle purges of rhubarb with ſpices, either in ſubſtance or infuſed in wine or brandy, and taken often enough to keep the body gently open; the tincture of rhubarb with the leſſer cardamom-ſeeds will anſwer the purpoſe, or the following electuary.

Take of frankincenſe, three drams—of rhubarb, one dram—of tormentil, two drams; all theſe in powder—of balſam of capivi and conſerve of roſes, of each half an ounce—ſimple ſyrup, enough to make an electuary; of which the quantity of a nutmeg may be taken twice a day, and waſhed down with three or four ſpoonfuls of the following mixture.

Take tincture of roſes and decoction of the Peruvian bark, of each ſix ounces. Mix them well together.

Blue vitriol, to the quantity of half a grain twice a day, diſſolved in any agreeable liquid, hath been alſo recommended, and the tincture of cantharides or Spaniſh flies taken in the ſame manner; of this the patient muſt begin with ten drops, and increaſe occaſionally to twenty as it agrees, and according to the ſtate of the diſeaſe and the conſtitution, drinking freely of barley-water or decoctions of the mucilaginous herbs.

But perhaps leſs violent aſtringents may in general be ſuſtituted, ſuch as powders made of equal parts of allum and Japan earth, and taken to the quantity of half a dram three or four times a day if the ſtomach will bear it, drinking after each doſe two or three table-ſpoonfuls of the tincture of roſes: the allum muſt be firſt melted.

Gentle opiates may alſo be uſeful, and may be given by ten or twelve drops of the liquid laudanum, once, twice, or thrice a day, in a draught of the patient's common drink.

By way of ſtrengthener and reſtorative, the Peruvian bark may be adminiſtered, either in powder, in a glaſs of wine, or in decoction; in the latter caſe it ſhould be repeated often.

To prevent this diſeaſe, or at leaſt a return of it, avoid violent exerciſe and exceſſive drinking; let the wine taken be rather Port or Rheniſh than Spaniſh or French; ſleep on a mattraſs rather than a feather-bed, and rub the loins frequently with a bruſh or dry flannel.

That diabetes, or rather incontinence of urine, which is occaſioned by extreme age, or conſtitutional weakneſs or decay, or which is the effect of external injury or of ſome acute diſeaſe, ſeldom admits of a cure; ſuch aſtringent and ſtrengthening medicines as we have preſcribed above may leſſen the complaint, and ſtrict attention to cleanlineſs, by removing the wet linen or bed-cloaths and ſupplying dry, may in ſome meaſure prevent it's being very troubleſome or offenſive.

CHAP. XXXII.

Of the Iſchury, or Suppreſſion of Urine.

THIS diſorder is deſcribed as of two kinds, a *ſtrangury* and *ſuppreſſion*: the former is a retention of the water in the bladder, attended with frequent motions to diſcharge it, but without effect; or if any paſſes, it is in very ſmall quantities, and with much difficulty; the latter is unaccompanied with any inclination to diſcharge the urine, or only occaſional and very ſudden inclinations.

This diſorder may be occaſioned by inflammation in the bladder or kidnies, want of mucus in the urethra or paſſage from the bladder, caruncles or fleſhy excreſcences in the ſame paſſage, defluxions of humours on the neck of the bladder, palſy in the *detruſor urinæ* or muſcular covering of the bladder, a retention of hardened excrement in the ſtraight gut, or from coagulations of blood in the bladder, from blows, bruiſes, or external injuries.

Though ſome of theſe caſes may demand the introduction of the catheter, yet if the urine is lodged in the bladder and cannot be diſcharged, whether the cauſe be cold, a too long retention of the urine, or whatever elſe deprives the fibres of the bladder of their contracting powers; or if the ſuppreſſion is from a ſtricture in the neck of the bladder occaſioned by inflammation, an immediate recourſe to this inſtrument will occaſion much pain, and other medicines ſhould be firſt tried: at any rate it ought only to be uſed by perſons of ſkill; and even bougies, which in many caſes may anſwer the purpoſes of the inſtrument, require a cautious and ſomewhat experienced hand.

Yet this diſeaſe demands ſpeedy attention, for if it continues more than ſix or ſeven days it is generally fatal; when it is in a high degree, it is alſo accompanied with a perpetual inclination to ſtool, a coldneſs of the extremities, a diſpoſition to vomit, and a weak pulſe; if theſe ſymptoms are attended with a hiccup, or if a ſmell of urine proceeds from the patient's mouth or noſtrils, there is no hope; and ſuch alſo is the caſe if the diſorder is occaſioned by a wound of the ſpine, or a diſlocation of any of the vertebræ or joints of the back-bone.

If the patient is of a full or ſanguine habit, bleeding will be neceſſary; and the following clyſter may be injected.

Take of common decoction, ten ounces—of Venice turpentine diſſolved with yolk of egg, ſix drams—of Florence oil, three ounces—purging ſalts, three drams. But this is the full quantity for a grown perſon, and muſt be leſſened according to age and other circumſtances.

Or the following—

Take of the common decoction, half a pound—of balſam of capivi mixed with yolk of egg, two drams—of Florence oil, two ounces—of liquid laudanum, from thirty to forty drops.

To make the common decoction—

Put two ounces of camomile flowers, elder flowers, and ſweet-fennel ſeeds, of each an ounce, into a gallon of boiling water. Let the ingredients boil a few minutes, and then ſtrain off.

After theſe clyſters the body ſhould be kept open by gentle laxatives, ſuch as infuſion of ſenna, or manna. The following mixture may be given.

Take of pure water, one ounce—of ſweet ſpirit of nitre, thirty drops—nutmeg water and Florence oil, of each two drams—liquid laudanum, from five drops to twenty—ſyrup of marſh mallows, one dram.

But baths and fomentations are of great importance in the removal of this diſeaſe: if the whole body can be immerſed the effect will be greater; but if this cannot be done with convenience, flannels wrung out of a decoction of the emollient herbs, or bladders filled with it, ſhould be frequently applied to the part affected; and after this has been repeated often, the herbs themſelves may be ſqueezed ſomewhat dry, and applied in a linen cloth.

When children are attacked by this complaint, poultices of raw onions or radiſhes have been efficacious.

If the neck of the bladder is inflamed, the uſe of the catheter will be required till the inflammation abates; in this caſe diuretics cannot be admitted without inconvenience; but nitrous medicines, neutral ſalts, ſpirit of ſea-ſalt, and the like, may be diluted in the common drink; ſmall doſes of camphire may alſo be given often, and decoction of parſley roots with a little nitre may be drank as the patient's thirſt demands; bladders of warm water may alſo be applied to the parts affected by the inflammation, and in this ſtate of the diſeaſe bleeding will be beneficial, and ſtools ſhould be procured with the purging ſalts and caſtor oil.

The food and liquors muſt be regulated by the appearances and ſymptoms of the diſeaſe: if they are inflammatory, the patient's diet ſhould be low, and his drinks acidulated; in other caſes broths, panada, and jellies of hartſhorn or calves feet, and ſago, ſhould compoſe the food; and the drinks may be decoctions of emollient herbs, in which a ſmall quantity of ſweet ſpirits of nitre may be admitted.

As ſedentary occupations are ſaid to encourage this diſorder, thoſe who are confined to them ſhould be particularly careful to avoid exceſſes in eating or drinking, and hard indigeſtible food; ſtale or ſour liquors of all kinds are prejudicial, and lying long in bed, and particularly in a ſoft one.

CHAP. XXXIII.

Of the Stone and Gravel.

THE former is a hard ſtony concretion in the kidnies or bladder, too large to paſs off with the urine, or making it's paſſage with great pain and difficulty; the latter are ſmall ſtones which paſs from the kidnies into the ureters, and are diſcharged with the urine.

The cauſe of theſe diſeaſes may probably be ſimilar to that which produces the gout, and both may be occaſioned by a defective ſolution of the earthy particles of our aliment by the powers of digeſtion; many other cauſes are aſſigned, ſuch as drinking much wine, and uſing earthy or ſtony water; but reaſons have been offered why neither contribute particularly to the formation of gravel and ſtone: a ſedentary life may undoubtedly increaſe theſe complaints, which may alſo be aggravated by exceſſes, by high and luxurious living, or by lying too hot, and indulging too much in bed; it may alſo be hereditary.

Perſons of vigorous conſtitutions are more liable to theſe diſeaſes than thoſe of relaxed and cold habits; and thoſe who are in the decline of life, and who have been much afflicted with gout, are peculiarly ſubject to them; and whoever will attentively obſerve and conſider, will diſcover an affinity between the gravel and ſtone and the gout, and may remark, that a fit of one is frequently changed into or terminates in a ſeizure of the other; and this obſervation will be rendered more ſtriking, if we recollect the chalky concretions which are frequently formed by the gout in the joints of the extremities, and compare them with the ſtony ſubſtances produced in the kidnies and bladder.

In ſome caſes the difficulty of diſcovering whether there is actually a ſtone in the bladder or not is ſo great, as to elude the beſt judgment that can be formed from ſymptoms, and even the greateſt ſkill in uſing the catheter; but in general it may be known by a ſoreneſs and itching at the top of the penis; by a deſire of going to ſtool on every attempt to diſcharge urine; by the patient's walking with his legs wide; by intenſe pain on every uncommon motion or exerciſe; by his paſſing his water drop by drop, or having it ſuddenly ſtopped if it is going off in a ſtream; by his receiving eaſe on lying back, and diſcharging his urine more eaſily in that poſture; and ſometimes by a diſcharge of matter either white or bloody; but the latter is not a common ſymptom.

The ſigns of ſtones in the kidnies are, obtuſe pains in the parts thereabouts; ſickneſs, nauſea, and vomiting; wind and coſtiveneſs; the pain ſometimes affecting the groin, the hip, or the adjacent teſticle; the leg on the ſame ſide as the diſeaſed kidney is at times contracted and ſeems numbed; a total ſuppreſſion of urine, or it is diſcharged frequently in very ſmall quantities at a time, and with extreme pain and difficulty; and a very diſtinguiſhing ſymptom of ſtones in the kidnies is, that a ſediment in the urine ſubſides almoſt immediately after it is diſcharged; and if this ſign accompanies all or the greater part of the others, no doubt will remain of the nature of the diſorder.

When the ſtones are of ſuch a ſize as to deſcend into the ureter, and yet to be detained there for a time, their ſituation is eaſily diſcoverable by the catheter; and when they are at length forced off with great pain, the patient is ſaid to have had *a fit of the gravel and ſtone.*

In theſe diſorders very great attention is due to regimen, and in particular to food and liquors; the former ſhould be of a light and laxative kind, and may conſiſt principally of ſuch vegetables as tend to promote the ſecretion of urine; among theſe the whole onion tribe may be recommended as medicines; and parſley, aſparagus, artichokes, carrots, and every other root and vegetable which affects the urine either as to colour or ſmell, will be beneficial in theſe diſeaſes: the drinks may be any preparations of milk, and decoctions of the diuretic and emollient herbs, ſuch as parſley, marſh-mallows, or the like; and, if the patient is accuſtomed to ſtrong liquors, he may be indulged in ſmall quantities of gin and water, nor will moderate draughts of fine porter be prejudicial.

In the intervals between the fits, the patient ſhould uſe moderate but conſtant exerciſe on horſeback if the pains will permit, if not in a carriage; but if either of thoſe motions ſhould occaſion extreme pain, as will generally be the caſe if there is a ſtone in the bladder, they muſt be omitted, leſt the irritation ſhould bring on inflammation, and dangerous conſequences ſhould follow. The firſt ſymptoms of gravel or ſtone ſhould excite us to avoid as much as poſſible a ſedentary life, and direct us to ſuch a regimen as may in all probability prevent the more troubleſome progreſs and fatal events which often follow inattention to early warnings.

During the continuance of a fit, the treatment muſt be different from that which is proper in the intervals; whilſt the pain is violent, which is always the caſe when a ſtone is detained in the urinary paſſages, bleeding is neceſſary; this evacuation both prevents and removes inflammation, and alſo tends to relax and ſoften the rigid fibres; and the patient ſhould ſit in warm water as high as the parts affected.

The uſe of clyſters is alſo peculiarly beneficial; when a warm decoction is thrown up, the vapours from it act as a fomentation in relaxing and ſoftening the kidnies, and alſo clear the inteſtines both of wind and of dry and hardened excrement, which uſually prolong, if they do not bring on the fit. For the compoſition of the clyſters the following form will be proper.

Take of the common decoction for clyſters, half a pint—of the balſam of capivi mixed with yolk of egg, two drams—caſtor oil, two ounces. If the pain is great, add from twenty to thirty drops of liquid laudanum.

After bleeding and clyſters, diuretic medicines may be given; but they ſhould be ſuch as are emollient and oily, and not of the forcing kinds; and, if vomiting occurs as a ſymptom, opiates may be added to the diuretics after it is abated, but not before.

The following preſcriptions are offered, as adapted to moſt caſes where diuretics and opiates are neceſſary.

For a common drink—

Take of common emulſion, in which a double quantity of gum Arabic hath been diſſolved, one pound and half—of white wine, four ounces—of ſyrup of marſh mallows, two ounces. Mix theſe ingredients well.

Or, take of the common emulſion as above, one pound—of poppy ſyrup, ten drams.

The following draught is alſo recommended.

Take of barley-water, one ounce and half—of compound juniper water, two drams—oil of almonds, and mucilage or jelly of gum Arabic, and ſyrup of marſh mallows, of each two drams—ſweet ſpirit of nitre, thirty drops. Mix together for a draught.

Vomiting is rather uſeful, helping to prevent the coheſion of the gravel, and to promote it's expulſion, ſo that it ought by no means to be ſuddenly checked; but if it ſhould become ſo extremely troubleſome that it ſhould be neceſſary to correct it, let the patient diſcharge the ſtomach of it's contents by a few draughts of warm water and camomile tea, and then give a ſaline draught in the act of fermentation, a few minutes after which the following may be adminiſtered.

Take of the vulnerary balſam, thirty drops—of liquid laudanum, twenty drops—of common mint water, one ounce. Mix for a draught.

Or the following draught may ſupply the place of both the foregoing.

Take of ſimple common mint water, one ounce—of freſh lemon-juice, half an ounce—of ſalt of wormwood, one ſcruple—of the vulnerary balſam, thirty drops—of liquid laudanum, twenty drops—ſyrup of marſh mallows, one dram.

If the urine ſhould appear tinged with blood, a ſymptom which ſometimes attends the gravel, an ounce of manna may be diſſolved in a quart of common milk-whey, and taken at ſeveral different draughts at convenient diſtances; and a ſlice of lemon ſucked now and then will quicken it's operation, and occaſion it's ſitting more eaſy on the ſtomach: if this medicine ſhould diſagree, a decoction or infuſion of ſenna will anſwer the purpoſe, and this ſhould be repeated twice a week, as it tends to abate the pain and leſſen the diſcharge of blood. If the bloody urine comes from the bladder, external applications, ſuch as bladders of warm water, or other fomentations, will be uſeful.

But in every other caſe of gravel and ſtone, the caſtor oil is to be preferred to all other purging medicines; and whether gravelly ſymptoms are produced by ſtone, or by any other cauſe of inflammation, emollient lubricating medicines are neceſſary after bleeding, and the oil of which we now ſpeak, tends in a peculiar manner to theſe ends, by relaxing the paſſage for the ſtone to paſs from the kidnies to the bladder; and the caſtor oil taken in the fit, and ſoap-lye at proper intervals, are recommended as equal in efficacy to any medicines in uſe for the cure of theſe diſeaſes.

The ſoap-lye muſt be taken at firſt in ſmall quantities, ſuch as from ten to thirty drops in a doſe, in half a pint of veal broth or new milk; increaſing the proportion of lye as long as it will continue on the ſtomach, and not prove troubleſome by excoriating the urinary paſſages.

Soap and lime-water have been alſo approved as medicines for theſe diſeaſes; the ſoap muſt be Spaniſh, and the lime-water prepared from ſea ſhells; of the ſoap not leſs than an ounce in twenty-four hours, ſwallowed in any manner the patient can get it down, and at leaſt two quarts of the lime-water, taken within the ſame ſpace of time, will produce any conſiderable good effect. The beſt way of taking theſe medicines, will be to divide the ſoap into three portions, and the lime-water into four, and to give one of the ſoap, waſhing it down with the portion of lime-water, early in the morning; the ſecond doſe of each between breakfaſt and dinner, as diſtant as poſſible from each meal; the third under the ſame regulation, between dinner and ſupper; and the fourth part of the lime-water at any time of the day that the ſtomach ſeems beſt diſpoſed to receive it.

But though ſuch conſiderable quantities of theſe medicines are neceſſary to favour expectations of a cure from them, yet the ſtomach ſhould be inured to them by degrees; ſmall quantities ſhould be given at firſt, and gradually increaſed; and even the ſtrength of the lime-water ſhould be leſſened by mixture with pure water, or by making it from lime which has already had one water prepared from it; and this alſo may by degrees be given more and more ſtrong, not only till the patient can bear the firſt water, but even that which has received the additional ſtrength of being again thrown on freſh lime.

And after all, a very ſudden amendment is not to be expected from theſe medicines; many perſons have perſevered in the uſe of them months, and even years, before they have derived any conſiderable benefit from them, and yet they have at laſt effected a cure; indeed it can hardly be conceived that a ſtone of any conſiderable ſize will be diſſolved by medicines of any kind, but after long uſe and frequent repetition.

There are alſo other remedies of a leſs violent nature, which are ſaid to have produced very happy effects in theſe diſeaſes; ſuch as an infuſion of the ſeeds of wild carrot in boiling water, which muſt be made of a degree of ſtrength proportioned to the violence of the complaints, and being ſtrained or poured off fine, and ſweetened with honey, ſhould be taken to the quantity of a quart or three pints in twenty-four hours, in ſuch draughts and at ſuch times as are moſt agreeable and convenient.

The following has alſo been highly recommended.

> Boil thirty berries of raw coffee in a quart of water, till it is of a deep greeniſh colour. Of this take from ſix to eight ounces every night and morning, adding to each doſe ten drops of the ſweet ſpirit of nitre.

The plant *uva urſi*, or bear's whortle berry, bear's whorts, or bear's bilberries, is alſo celebrated as a cure for theſe complaints, as well as for ulcers in the urinary paſſages; half a dram of powder made from the dried leaves, is directed to be taken in the morning faſting, or the ſame quantity two or three times a day: this medicine is probably leſs efficacious than the ſoap and lye, but it is alſo much leſs diſagreeable.

But as there are alſo a great variety of ſimple remedies, which have each it's advocates, and the uſe of which may in many inſtances be attended with ſucceſs, and therefore ought to be tried where the medicines we have preſcribed are not at hand; we have ſelected ſuch as have been known at leaſt to alleviate the pains of theſe diſorders, and perhaps to have prevented their progreſs.

Decoction of the herb agrimony, boiled in water about ten minutes, ſweetened with honey, and taken morning and evening in the quantity of half a pint at each time.

Drink a pint of warm water every day juſt before dinner; if one ſtone ſhould be diſcharged, it is ſaid this courſe will prevent another from forming.

Slice a large onion, pour half a pint of warm water on it; let it ſtand twelve hours, then pour off the water and drink it: repeat this every morning.

When the fit is violent, beat raw onions to a pulp, and apply poultices of them to the bottom of the back and the groins.

Take a large onion, cut it into ſlices, and calcine it in a fire-pan till it becomes white aſhes. Of theſe take a tea-ſpoonful morning and afternoon in a glaſs of white wine.

Boil one ounce of common thiſtle root, and four drams of liquorice, in a pint of water, and drink half this quantity every morning.

Drink plentifully of water in which turnips have been boiled and preſſed, ſweetened with honey.

There is alſo another diſorder, which though not preciſely of the ſame kind, yet bears ſo near a relation to complaints of ſtone and gravel, that it may be proper to mention it in this place.

This is the *ſtone in the gall-bladder*, which is not of the nature of the abovementioned concretions, being the bile hardened into lumps; and theſe are, for the moſt part, found in the gall-bladder, though they are alſo often met with in the common gall-duct.

Theſe gall-ſtones ſometimes lie ſo quiet in the gall-bladder as never to occaſion any indiſpoſition, or to be known to exiſt, till they have been diſcovered after death by diſſection; but if they are detained in their paſſage through the gall-duct, they alſo in general obſtruct the paſſage of the gall into the inteſtines, which occaſions many other diſorders.

The ſymptoms of this diſeaſe are uncertain, reſembling in many caſes ſo nearly thoſe of other diſorders, that it is difficult to aſcertain it; yet the following ſigns uſually attend this of a ſtone in the gall-bladder.

A loſs of appetite, a ſenſe of fulneſs and diſtenſion of the ſtomach; ſickneſs, vomiting, languor, inactivity, want of ſleep; and if the obſtruction continues a few days, a waſting of the fleſh; the eyes, ſkin, and urine become yellow, and the excrement of a whitiſh colour; and, above all, the moſt certain ſymptom is, that the pulſe is not affected by the pain, which is excited by obſtructions of the gall-ducts from ſtones paſſing through, but continue as when the patient is in perfect health.

The pain is in ſome caſes extremely acute, in others ſlight, and the degrees of the yellowneſs and other ſymptoms, as well as the duration of them, are various; but however violent the pain may be in this diſorder, it admits of ſpeedy relief from medicine, and is ſeldom attended with much danger.

If the pain is intenſe, opiates ſhould be adminiſtered as ſoon as the patient complains, and this in pretty conſiderable quantities, ſuch as twenty or thirty drops of liquid laudanum, in a glaſs or tea-cupful of the patient's common drink, which muſt be repeated at proper intervals till eaſe is procured.

The vomiting which uſually accompanies this diſorder, is to be conſidered as an effort of nature to diſlodge the gall-ſtones, and ſhould therefore be encouraged; and even if this ſymptom does not appear, it will be right to give a gentle emetic, and repeat it if neceſſary, adminiſtering an opiate immediately after it's operation: purging medicines will alſo anſwer the ſame end as vomits; but ſuch ſhould be choſen as act with eaſe, and may be continued with the greateſt ſafety; ſuch as caſtor oil, ſea water, the water of purging ſprings, or neutral ſalts; and theſe may be repeated every day, if neceſſary, for a length of time, intervening now and then a moderate doſe of rhubarb.

Among the ſimple medicines recommended for the cure of this diſeaſe, the juice of graſs in the ſpring ſeems to have obtained moſt credit; it may be taken in the quantity of a table-ſpoonful in any common drink, or be made into a ſyrup with ſugar.

It may be right to caution our readers to lie with their heads, and the upper parts of their bodies, conſiderably higher than the lower parts, for thus the urine is not detained in the kidnies long enough for the concretion of the earthy or tartarous parts.

CHAP. XXXIV.

Of Hæmorrhages or Diſcharges of Blood.

VOLUNTARY diſcharges of blood are ſalutary, when no inconvenience is obſerved to ariſe from them, for then the habit is one way or other relieved; in acute diſorders they are frequently critical, and ought by no means to be ſtopped, and there are but few ſpontaneous hæmorrhages that would prove fatal if no means were uſed to check them; much more dangerous conſequences are likely to ariſe from ſtopping them injudiciouſly, than by ſuffering the blood to flow till it ceaſes of itſelf, provided the diſcharges be not immoderate, or continued ſo long as to endanger the patient's life; all, therefore, which ought to be attempted, is to check their violence, and watch attentively that they do not become ſo exceſſive as to occaſion immediate danger, or ſo frequent as to produce dropſy, hectic fevers, or conſumption.

The ſeats of *ſpontaneous hæmorrhages* are generally where the veſſels are tender, and not braced up by adjoining or covering membranes; ſuch as the noſtrils, the branches of the lungs, the gums, ſtomach, that inteſtine which is called the *ileum inteſtinum*, the extremity of the ſtrait gut, the womb and paſſages from it.

Thoſe who have too much ſerum or thin humour in their blood; thoſe who lead ſedentary lives, or whoſe perſpiration is defective; and ſuch as eat more than they can eaſily diſcharge, and particularly if the food is of an acrid or irritating quality; are moſt liable to involuntary diſcharges of blood: and theſe diſcharges are generally from the noſe in young perſons; from the lungs in thoſe who are advanced to manhood; beyond that period, the piles frequently occaſion a conſiderable loſs of blood; and whenever it occurs in old age, it is generally from the urinary paſſages.

The cauſes are not always either a redundancy of the blood, or it's acrimony or thinneſs; it may be occaſioned by an irregular circulation which happens when the parts remote from the heart are, by obſtructed perſpiration, or any other ſtricture, ſo braced up, that the blood cannot eaſily return through the veins; but thoſe hæmorrhages that are ſymptomatic, may be produced by obſtructions, or hardneſs of the veſſels and internal parts, which may put a ſtop to the free circulation of the fluids, and impel too great a quantity to particular parts: voluntary diſcharges of blood may likewiſe proceed from an inflammatory diſpoſition of that fluid, or from it's being in a diſſolved ſtate; which is the caſe in all putrid diſorders, where thoſe diſcharges are very common; in particular in the malignant ſmall-pox, putrid and malignant fevers, the dyſentery, and the ſcurvy, when it is in a very high degree.

Hæmorrhages may alſo be occaſioned by an exceſſive uſe of ſtrong medicines, to procure evacuations either by ſtool or vomit; from ſuch medicines as have a tendency to a diſſolution of the blood, ſuch as volatile alcaline ſalts, cantharides, or the like; by violent bodily exertions, or unuſual poſtures; and by vehement agitations of the mind, the effects of which have been ſometimes inſtantaneouſly fatal.

The beſt remedies, if the diſcharge is internal, are a cool air, reſt of the body, and quiet of mind; a ſparing mild diet, the food chiefly fruits, vegetables, and ſpoon-meats; the liquors ſmall, diluting, and emollient; and both taken in ſmall quantities at a time; if the blood has a putrid tendency, acids may be plentifully adminiſtered; and in all caſes, where it is neceſſary to ſtop the diſcharges, opiates may be given in ſmall doſes, and the body kept open by a very moderate uſe of Glauber's ſalts, or a tea-ſpoonful of the lenitive electuary now and then. Rubbing the lower extremities with warm flannel cloths, and bathing them in warm water, will alſo be uſeful; and where the cauſe of the hæmorrhage is an obſtruction of perſpiration, it muſt be removed in the uſual manner, by keeping in bed, drinking warm diluting liquors, and promoting gentle ſweats.

If the diſorder is ſymptomatic, or ariſes from ſome other diſeaſe, that muſt be removed before the hæmorrhage can be ſtopped; and in acute diſorders, when theſe diſcharges are but ſmall, and ceaſe of themſelves during the continuance of the diſtemper, it may be apprehended that the cure will be at leaſt tedious, if it is effected without conſiderable danger.

Perſons rarely die of hæmorrhages except any of the large arteries are divided; thoſe who ſuffer a very great loſs of blood generally faint, and then the diſcharge ceaſes: in ſuch caſes all that ought to be done is juſt to ſupport the patient's life, by giving him frequently ſmall quantities of broth, and waiting till the divided veſſels contract themſelves and join; cordials, given with a view to recover patients from ſuch faintings, inſtead of reſtoring the loſt quantity of fluids, occcaſion the loſs of more blood, by increaſing the action of the veſſels upon the remaining contents. It has been adviſed by very eminent phyſicians to leave all internal hæmorrhages to nature, for in general the patient's life is not in danger, if he is permitted to faint.

CHAP. XXXV.

Of Diſcharges of Blood from the Noſe; of ſpitting and vomiting Blood; and of bloody Urine.

BLEEDING at the noſe is a frequent complaint in lax ſpongy habits, and where the veſſels are ſmall and numerous: lean perſons are not ſo ſubject to it as fat; but when it happens to the former, it is generally very copious. Perſons whoſe livers or other internals are ſchirrous and weak, are liable to frequent and profuſe hæmorrhages from the noſe, and ſo are thoſe who are afflicted with dropſies.

The cauſes are ſuch as have been aſſigned in the preceding chapter, and in each particular caſe may be diſcovered from the conſtitution and habit of body.

Bleedings from the noſe are frequently preceded by a degree of quickneſs in the pulſe, fluſhes in the face, heavineſs of the head, dimneſs of ſight or a kind of miſt before the eyes, heat and itching in the noſtrils, and a pulſation or beating in the arteries of the temples; and they are generally accompanied, in common with other hæmorrhages, by a ſtraitneſs of the ſkin and external parts, a ſhivering, wearineſs in the limbs, pains in the belly, and coſtiveneſs.

In many inſtances theſe diſcharges of blood are ſalutary, and relieve thoſe who labour under intenſe head-achs, vertigos, bad ſight, or even epilepſy. In moſt inflammatory diſorders, whether in the head or of the inteſtines, they are generally ſerviceable, and are often beneficial in partial inflammations, ſuch as gout or rheumatiſm: but thoſe who in childhood are ſubject to ſuffer conſiderable loſſes of blood from the noſe, will, as they advance in life, feel themſelves liable to rheumatiſm, piles, ſtone, and colic.

Before attempts are made to cure, it will be right to conſider the cauſe of this diſcharge with great attention, and reflect that it is much oftener attended with advantage than injury; and that it is in many caſes an effort of nature to part with ſuch a quantity of diſeaſed blood as would require to be drawn off by the lancet, in order to remove ſome preſent or threatened diſtemper.

This is the caſe apparently in inflammatory fevers; and even when it happens to perſons in health, it will be right to let it take it's courſe, eſpecially where a fulneſs of blood, a ſanguine habit, and a florid countenance, indicate the probability of it's preventing ſome dangerous diſeaſe.

Periodical bleedings at the noſe ſhould by no means be ſtopped, at leaſt not until the patient is much weakened by them; an apoplexy or lethargy will be the probable conſequence of checking a diſcharge, which by it's certain return is evidently neceſſary.

When, however, theſe diſcharges proceed with violence, and continue ſo long as to bring the patient's life into danger, which will be the caſe if the pulſe droops, his lips grow pale, and his extremities cold, and he complains of ſickneſs, or is ſeized with cramps or hiccups, immediate endeavours muſt be uſed to prevent fatal effects.

For this purpoſe ligatures or bandages ſhould be applied to the bendings of his arms, at the elbow, and at the wriſts, and the garters ſhould be tied ſomewhat tighter than uſual; but all theſe bandages ſhould be looſened as the flowing of the blood ſtops, and gradually removed when there is no longer an immediate apprehenſion that it will recommence.

If theſe methods fail, bathe the feet, legs, and hands, in warm water, and adminiſter a moderate doſe of Glauber's ſalts immediately; and let the following draughts ſucceed it's operation.

Take of pure water, one ounce—of nitre, half a ſcruple—of ſyrup of poppies, three drams. Make a draught, to be repeated every third or fourth hour.

Let the patient ſnuff vinegar, or vinegar and water, up his noſtrils, or diſſolve a ſmall quantity of blue vitriol in a glaſs of tincture of roſes; dip a doſſil of lint in this mixture and introduce it into the noſtrils; or a like quantity of the tincture of roſes, with about twenty drops of the weak ſpirit of vitriol, may be given internally, if the bleeding remains unchecked by any of the foregoing means.

Should theſe applications prove alike unſucceſsful, and the complaint ſtill continue with violence, the following method is recommended to ſtop the blood.

Take a piece of ſtrong ſewing ſilk well waxed, and faſten to one end of it a doſſil of lint; then take a piece of catgut (about the ſize of a ſecond ſtring of a violin) and introduce it up the bleeding noſtril; when it is perceived in the mouth, take hold of it's end with a forceps, and draw it gently to the lips; there faſten the end of the waxed ſilk to it, and withdraw the catgut back again by the end which remains at the noſtril till you get at the ſilk, which you may take hold of, and pull the doſſil of lint into the poſterior noſtril, or the aperture into the back part of the mouth, after which ſtuff the external noſtril with lint, and the blood will be effectually ſtopped. Theſe doſſils muſt be ſuffered to remain a day or two, and then removed carefully.

This method is peculiarly neceſſary when the blood falls into the mouth as ſometimes happens, and burſting afreſh, after it has been ſuppoſed to be ſtopped, during the patient's ſleep, paſſes into his throat and threatens ſuffocation.

The powder of burnt cork to be ſnuffed up the noſtrils is alſo recommended as efficacious in ſtopping the blood, and cloths dipped in cold water and applied to the back part of the neck and between the legs is very often ſucceſsful.

Where the bleeding at the noſe returns frequently, and weakens the patient conſiderably, the following medicines have been preſcribed.

Take of compound amber powder, one ſcruple—of nitre, half a ſcruple—balſamic ſyrup, enough to make a bolus. To be taken going to reſt.

Or, take of the decoction of Peruvian bark, one ounce and half—of tincture of Japan earth, two ſcruples—of liquid laudanum, four drops—ſimple ſyrup, one dram. Make a draught, to be taken every four or ſix hours, according to circumſtances.

Or, take of burnt alum powdered, half a ſcruple—of dragons blood powdered, one dram—ſimple ſyrup, enough to make theſe ingredients into eighteen pills, three of which may be taken twice or thrice a day.

Or from twenty to forty drops of tincture of antimony taken in a glaſs of wine, or wine and water, three or four times a day, may effectually anſwer the purpoſes of the foregoing preſcriptions; and more eſpecially if the diſeaſe proceeds from a thin diſſolved ſtate of the blood.

And certain precautions are neceſſary for thoſe who are ſubject to theſe diſcharges, in ſuch a degree as to be attended with loſs of ſtrength and to occaſion dejection of ſpirits; they ſhould be attentive to guard againſt taking cold, and eſpecially by keeping their feet from the wet, and wearing warm ſtockings; they ſhould alſo frequently bathe their lower extremities in warm water; they ſhould forbear intenſe ſtudy, and particularly hanging down the head to read or write; ligatures round the neck are alſo injurious; and all ſtooping or bending poſtures ſhould be avoided.

The diet muſt be regulated by the habit and conſtitution of the patient, and the apparent nature of the diſorder; if he appears to be too full of blood, light food, diluting liquors, and cooling purges will be neceſſary; if, on the contrary, the diſeaſe ſeems to be occaſioned by any tendency to putrefaction, comfortable and nouriſhing food and cordial drinks will be moſt proper.

Spitting of blood, called alſo *hæmoptoe* and *hæmoptys*, is properly a diſcharge of blood from the lungs; and it may be occaſioned by various cauſes, ſuch as accidental ruptures of the veſſels, the degree of danger attending which is always proportioned to the ſize of thoſe veſſels, but in all caſes the patient's being kept quiet, or otherwiſe, will leſſen or augment the violence; by ulcers in the lungs, when the blood is forced up in coughing mixed with phlegm or matter, in which caſe the danger is conſiderable, as this appearance denotes injury to ſome large veſſel; or from ruptures of the bronchial or pulmonary arteries.

It may alſo be brought on in either of the foregoing caſes by extravagant paſſions, and great ſtrain and labour of the body; by weakneſs of the veſſels, over fulneſs of blood, exceſſes of drinking, violent exertions of the voice, and intenſe thought.

Or it may be produced by wounds and bruiſes, external or internal; by ſolid bodies accidentally getting through the windpipe to the lungs; by diſeaſes of the lungs; by a long contined dry cough; by the ſtoppage of any other evacuation of blood, either the periodical diſcharges of women, or the bleeding piles in the other ſex; by hectic fevers; by intenſe heat or cold; or by air ſo rarified as not to admit of the free motion of the lungs.

People who indulge in violent paſſion, thoſe of weakly habits and of ſlender makes, with long necks and flat breaſts, and thoſe who in the early parts of their lives have been ſubject to bleedings of the noſe, are moſt liable to this diſorder.

The patient ſhould be kept cool in body, and quiet in his mind; his diet ſhould be nouriſhing, but ſoft, mild, and light; his liquors preparations of milk, barley-water, or infuſions of the emollient herbs; but both his food and drinks ſhould be adapted to his ſtrength and the ſymptoms: in ſome inſtances he muſt be kept extremely low, in others a more generous regimen may be neceſſary, but in all caſes ſpirituous and fermented liquors ſhould be avoided, or at leaſt uſed ſo very ſparingly as not to riſk the rarifying of the blood; he ſhould be enjoined to ſpeak as little as poſſible, and when it is neceſſary, in ſo low a tone of voice as not to diſturb the veſſels of his lungs; and all his liquids ſhould be taken cold, and in very ſmall quantities at a time.

Spitting of blood is in ſome caſes ſymptomatic: in pleuriſies and inflammations of the lungs it is rather uſeful than prejudicial; but in dropſies, ſcurvies, conſumptions, and the like, it is attended with danger, becauſe in thoſe caſes it proceeds from ulcers in the lungs.

When this diſorder attacks perſons of robuſt habits and ſtrong conſtitutions, it is ſeldom attended with much danger; but in the weak and feeble, the cure is extremely difficult, and not often effected: when it proceeds from an ulcer it is frequently fatal.

The preceding ſymptoms of a ſpitting of blood, are pain, weight, and anxiety about the breaſt; a difficulty of breathing; an oppreſſive rambling pain in the ſtomach; wind; hoarſeneſs; a dry and tickling cough; ſhiverings; coldneſs of the extremities; wearineſs; and pains in the back, loins, and limbs: as theſe ſymptoms denote a ſtricture on the veſſels, and a diſpoſition in the blood to inflammation, ſo they are commonly forerunners of a copious diſcharge of that fluid. Sometimes the diſcharge, when it hath not laid any conſiderable time on the breaſt, will appear thin and florid; if it hath remained there long, it will be thick and blackiſh, and in ſome inſtances it comes away in a kind of froth with a ſhort cough, and in this caſe the patient has a degree of fever, which abates with each diſcharge of blood, and returns at intervals during the continuance of the diſorder.

As we have already obſerved, this diſcharge is in many inſtances a favourable effort of nature; it ought never, therefore, to be ſuddenly ſtopped by aſtringent medicines, nor even checked by any interpoſition of art before the patient appears to loſe his ſtrength.

When that is the caſe, bleeding in the arm may be neceſſary, according to the age of the patient and his ſtate of body, which muſt alſo direct how far the repetition of this operation may be permitted; though it ſhould be obſerved, that it is moſt adviſeable to take away a conſiderable quantity of blood at once, as one copious bleeding is more uſeful than ſeveral ſparing ones.

Glauber's ſalts in ſmall quantities ſhould be repeated ſo as juſt to keep the body in a lax ſtate; or the ſame purpoſe may be effected by a tea-ſpoonful of the lenitive electuary taken now and then, and by infuſions of tamarinds, ſtewed prunes, the pulp of roaſted apples, and the like; theſe acids will be uſeful if the diſorder is attended with heat or fever, as well as lemon or orange-juice, currant-jelly, or a few drops of ſpirit of vitriol, in the patient's ordinary drink.

Great reliance may be placed on nitre if taken early in the diſeaſe, and the following method is adviſeable.

Take of nitre, half an ounce—conſerve of roſes, four ounces. Mix to an electuary, and take the quantity of a nutmeg every third, fifth, or ſixth hour.

Tincture of roſes, taken in the quantity of a wine-glaſsful every third, fourth, or ſixth hour, according to circumſtances, is alſo recommended; and conſerve of roſes, either alone or made into an electuary with balſamic ſyrup, and a ſmall portion of the ſyrup of poppies, may be taken to the amount of ſeveral ounces in the twenty-four hours.

Ligatures, as directed for bleeding at the noſe, may alſo be found uſeful, and in general nearly the ſame aſtringents, if from alarming ſymptoms they ſhould be required.

Opiates may alſo afford relief, eſpecially if the diſcharge of blood is promoted by a troubleſome cough, and the ſtorax pills, or liquid laudanum, may be given in ſuch doſes as may juſt ſerve to allay it; and bathing the lower extremities in warm water will alſo aſſiſt in giving eaſe to this ſymptom.

Some have adviſed the gums and nitre in the following compoſition.

Take gum Arabic powdered, compound powder of gum tragacanth, and powdered ſtarch, of each half a ſcruple—of nitre, ſix grains—of gum maſtich, half a ſcruple. Make a powder, to be taken three times a day, and waſhed down with three or four ſpoonfuls of tincture of roſes without acid.

And the following decoction for a common drink.

Take of candied eringo root, two ounces—of gum Arabic, one ounce—raſped hartſhorn, Spaniſh liquorice, and balſam of Tolu, of each an ounce and half. Boil theſe ingredients a quarter of an hour in a quart of lime-water and barley-water, mixed in equal quantities. When cold, ſtrain it off, and add to the decoction two ounces of balſamic ſyrup.

The cauſes of this diſorder will point out the proper means of preventing it, which conſiſt chiefly in avoiding all exceſs both bodily and mental, and a forbearance from heating, irritating, and acrimonious food, and ſpirituous and fermented liquors.

Vomiting blood, though not ſo common a diſorder as ſpitting it, is yet equally dangerous; the blood which comes up in gulps, and is diſcharged in a fluid ſtate, comes from the ſtomach.

It proceeds in many caſes from the ſame cauſes as thoſe which produce bleedings from the noſe; and may alſo be occaſioned by the obſtruction of female periodical diſcharges, or by ſtopping the bleeding of the hæmorrhoidal veſſels, or piles; by obſtructions in ſome of the internal parts of the body; by external blows or injuries; or by poiſonous matter, or hard and indigeſtible ſubſtances, conveyed into the ſtomach; and from ruptures of the bronchial or pulmonary arteries.

When the latter is the caſe, and the diſcharge of blood is conſiderable, though the rupture may cloſe up, yet the blood may fall into the bowels and occaſion putrid diſeaſes.

If this ſhould happen, the danger will be much greater than when the blood is freely thrown up by vomiting in a florid ſtate; in the latter caſe the ſame treatment which we have preſcribed for ſpitting blood will in general effect a cure; but in the former, ſuch methods muſt be taken as in the approaches of a dyſentery or putrid fever.

The ſymptoms of an approaching vomiting of blood, are generally a ſwelled or diſtended ſtomach, and a ſenſe of oppreſſive fulneſs and weight; where the ſtomach alone is affected there is no cough.

The regimen muſt be nearly what we have preſcribed for the foregoing diſorder, and particular care is neceſſary to avoid every thing ſtrong, acrid, or heating.

If there are evident tokens of inflammation, bleeding may be neceſſary; but where this diſeaſe proceeds with violence, the patient's ſtrength will be too ſoon exhauſted to bear this evacuation; but in all caſes the body ſhould be kept open by very gentle laxatives and emollient clyſters, and opiates may be adminiſtered in ſuch proportions as we have recommended to thoſe who are troubled with ſpitting of blood.

Nitre has been alſo adviſed in the following forms.

Take of pure water, two ounces—of nitre, one ſcruple—ſyrup of poppies, two drams. Make a draught, to be taken every four hours.

For a common drink—

Take of common emulſion, one pint and half—of ſimple cinnamon water, two ounces. Mix, and diſſolve in the mixture three drams of nitre.

Take of compound powder of amber, fifteen grains—of nitre, half a ſcruple—of camphire, two grains—of ſimple ſyrup, enough to make a bolus. To be taken occaſionally, with a tea-cupful of tincture of roſes after each.

Bloody urine is occaſioned by a diſcharge of blood from the kidnies or bladder; when pure blood is ſuddenly and copiouſly brought off without pain, it flows from the kidnies; if the quantity of blood is ſmall, the colour black, and if the patient complains of pain and heat, or either, during the diſcharge, or after it, it proceeds from the bladder; if a rough ſtone in paſſing from the kidnies to the bladder wounds the ureters, great pain is felt in the back, and a conſiderable difficulty in making water; and the pains are ſtill more acute and ſevere if the bloody urine is occaſioned by the bladder itſelf receiving injury from a ſtone, in which caſe an inflammation and ſtoppage of urine generally enſues.

Bloody urine may alſo be cauſed by ſtrong purges, forcing diuretics, or other violent medicines producing ſpaſms or contractions of the belly; it may proceed from external injuries, ſuch as blows or bruiſes, from ſtrains in lifting or carrying great weights, or from any violent exerciſe; and it may alſo be occaſioned by a ſtoppage of the bleeding piles, or from irregularity, or the ceſſation of the periodical evacuations of women.

It is alſo ſometimes ſymptomatic, as in the ſmall-pox and malignant and putrid fevers; and the urine is often bloody when it does not immediately appear upon inſpection, and this is diſcoverable by paſſing it through a napkin, which will be tinged by any bloody particles which it contains.

There is alſo a ſpecies of the piles which diſcharges itſelf in the urinary paſſages, and which is often ſalutary, as well as thoſe diſcharges from the hæmorrhoidal veſſels which are made externally.

All other caſes of bloody urine are attended with more or leſs danger; but when the bloody urine is mixed with matter, it either proceeds from ulcers in the urinary paſſages, or from ulcerated or wounded kidnies, which are generally to be dreaded.

Wherever this diſeaſe occurs, the patient's diet ſhould be light, ſoft, and eaſy of digeſtion; his liquors of a healing and balſamic quality; and, if ulcers in the kidnies or bladder are ſuſpected, the decoction of marſh mallows and liquorice will be uſeful as a common drink.

When the diſorder proceeds from fulneſs, or from a ſuppreſſion of other evacuations of blood, it will be neceſſary to bleed and keep the bowels open, and both will be ſtill more requiſite if there is any tendency to, or actual inflammation: in that caſe frequent draughts of infuſion of linſeed will be proper, and ſmall portions of nitre may be diſſolved in each draught immediately before it is taken; Glauber's ſalts may alſo be given every other day, in ſuch doſes as will procure gentle evacuations.

When this diſeaſe is occaſioned by a ſtone in the bladder, the patient ſhould reſt from labour and exerciſe, and take a doſe of manna diſſolved in a pint of milk whey twice a week, and if neceſſary a few drops of liquid laudanum after it's operation; and if a ſuppreſſion of the piles hath brought it on, bleeding will be neceſſary, and moderate doſes of the *tinctura ſacra*, or ſacred tincture.

When a putreſcence in the blood and juices produce bloody urine, the bark and acids, and in particular the vitriolic elixir, are immediately and abſolutely neceſſary, and the patient muſt be treated as directed in thoſe putrid diſorders of which it is a ſymptom.

Of all aſtringent medicines, the *uva urſi*, or bear's whortle berries, or bilberries, is the only one that ought to be admitted, at leaſt unleſs the patient's ſtrength ſeems to be very conſiderably exhauſted, in which caſe tincture of bark, to the quantity of an ounce divided into three doſes, may be taken in the twenty-four hours, each doſe in a large tea-cup of lime-water.

The uva urſi, which is ſaid to be a ſpecific in this complaint, may be taken in ſuch quantities as have been already preſcribed in treating of the *ſtone and gravel*.

CHAP. XXXVI.

Of the Hæmorrhoids, or Piles.

A Diſcharge of blood from the hæmorrhoidal veins is ſo named, and this is alſo called the *open* or *bleeding piles*; when there is no diſcharge of blood, but only hard and painful tumors at the lower part of the rectum or ſtraight gut, the diſeaſe caſe is called the *blind piles*; and near the extremity of this gut internally, are little jagged proceſſes, which are the ſeat of the internal as well as external piles.

Thoſe who are of a looſe ſpongy habit, and diſpoſed to live high, eat heartily, drink freely, and uſe little exerciſe, and thoſe who are habitually coſtive, are moſt liable to this diſorder; and it more frequently attacks men than women, unleſs where the latter are equally prone to the beforementioned indulgencies, or are of a bilious or melancholy diſpoſition; pregnant women are peculiarly ſubject to this diſeaſe, from the preſſure on the hæmorrhoidal veſſels.

In other caſes the immediate cauſe is a difficult circulation of the blood through the hæmorrhoidal veins, which may be occaſioned by whatever generates a redundance of blood, or invites it in too large portions to thoſe veſſels; violent purges of aloes, jalap, and in ſome conſtitutions rhubarb, will bring on the piles; and high-ſeaſoned food, quantities of garlick, ſweet and ſtrong wines, may alſo produce this diſeaſe; which may likewiſe proceed from colds, violent exerciſe on horſeback, ſitting long on a hard ſeat, uſing a neceſſary-houſe built over water, neglect or ſtoppage of accuſtomed evacuations, coſtiveneſs and hard ſtools, or from any violent agitation of the body or mind.

The *blind piles* appear in the form of tubercles, or little tumors of different ſizes, from that of a pea to an egg; they are diſtinguiſhed from all other tumors about the fundament by their colour, which is livid or black, and by their reſiſtance to the touch, feeling when preſſed with the finger like bladders filled with water, which circumſtances are not obſervable in other tubercles about that part, ſome of which are ſoft and not painful, and others are hard, painful, and have an inflammatory appearance.

The blind piles generally attend full and coſtive habits, pregnant women, or thoſe who have ſuffered in ſevere labours, or are irregular in their periodical evacuations; the blind piles ſometimes occaſion ſuch ſpaſms or contractions in the fundament, as to render ſitting difficult, and the adminiſtering a clyſter actually impoſſible, and even in ſome caſes give riſe to a fiſtula. If theſe blind piles burſt, which ſometimes happen, they form the bleeding or open piles.

The burſting out of the hæmorrhage in the *open piles* is generally preceded by contractions, ſtrictures, flatulencies, pain about the very lower extremity of the back-bone, near that which is called the *os ſacrum*, and a general indiſpoſition of the whole frame.

When this diſorder begins to grow exceſſive, the diſcharge is black and clotted, afterwards it appears more red and florid, at length it becomes thin and ſlimy, and in this ſtate the ſtrength is impaired; and if no check can be given to the diſeaſe, the pulſe fails, or is languid and trembling, and the termination is a hectic fever or a dropſy.

But we deſire it may be underſtood, that we do not conſider moderate diſcharges from the hæmorrhoidal veſſels as a diſeaſe; whilſt they continue within due bounds they unqueſtionably give relief to the conſtitution that is oppreſſed by aſthma, gout, ſciatica, diſeaſes of the bladder or kidnies, hypochondria, hyſterics, and madneſs, and even ſome acute diſorders, ſuch as colic and inflammatory fevers.

But when the patient is enfeebled, when he loſes his appetite, or the powers of digeſtion fail; it will be neceſſary to put a ſtop to the violence of the evacuation, and to ſuch caſes our future directions and preſcriptions are pointed, which muſt alſo be regulated by age, ſtrength, habit of body, and other circumſtances; though the effect it has on the patient's ſtrength will always be the beſt guide, for whilſt that continues unimpaired, it may be attended with as many ill conſequences to ſtop the diſcharge as to ſuffer it to proceed without endeavours to reſtrain it after the patient's conſtitution apparently ſuffers by it.

When theſe diſcharges after a certain time ceaſe of themſelves, and return periodically, they ought to be conſidered as ſalutary efforts of nature, and ſhould by no means be ſtopped or checked by art.

When, however, from their immoderate quantity and long continuance, attention to them becomes neceſſary, our firſt care ſhould be to regulate the patient's diet, and for this purpoſe he ſhould be directed to abſtain from all fleſh meats, or at leaſt from all ſuch as are heavy or hard of digeſtion; and his food ſhould be chiefly broths, ſago, panada, and other ſpoon-meats; and his drinks milk and water, whey, chalybeat waters, or decoctions of mucilaginous herbs, or thoſe which are of an aſtringent quality; ſuch as the roots of tormentil, ſnake-weed, or marſh mallows: an incautious uſe of high, heating, and otherwiſe improper food, and ſpirituous or fermented liquors, will render the beſt medicines ineffectual. He who would reſtore his health, and preſerve it in future from the attacks of this diſeaſe, muſt obſerve attententively, and avoid what appears to have occaſioned it, and whatever may tend to increaſe it.

Bleeding may be neceſſary in the blind piles; and eſpecially where the patient's habit is groſs or ſanguine, the body ſhould be kept open, and cooling diluting liquors may be taken freely.

For opening medicines, the following will anſwer the purpoſe better than moſt others.

Take of the electuary of caſſia, two drams—of nutmeg water, one dram and half—pure water, two ounces. Make a draught, to be taken in the morning faſting.

Or, take of lenitive electuary, one ounce—flowers of brimſtone, and nitre, of each one dram—ſyrup of roſes, ſufficient to make an electuary, of which the quantity of a nutmeg may be taken night and morning.

To make the electuary of caſſia.

Take the laxative ſyrup of roſes, and the pulp of caſſia freſh extracted, of each three ounces—of manna, one ounce—of the pulp of tamarinds, half an ounce. Warm the ſyrup, and having rubbed the manna in a mortar, diſſolve it in the ſyrup, then add the pulps, continuing the whole over a ſlow fire, and ſtir it to the conſiſtence of an electuary.

Caſtor oil may alſo be given in this diſeaſe to keep the body open, and is perhaps equal to any other medicine that can be offered for this purpoſe: clyſters of the moſt emollient kind, if they can be injected, will alſo be uſeful; but where the ſwelling will not admit of their being adminiſtered, vomits have been adviſed, though we would rather recommend a reliance on gentle opening medicines.

Common fomentations will afford eaſe, and in caſe the bleeding is conſiderable the following.

Take of the flowers of roſes, two handfuls—of elder flowers, one handful—of red Florence wine, one pint and half. Boil it very gently till it is reduced to a pint.

Or, take of ſimple lime-water, eight ounces—of liquid laudanum, ſix drams. Both theſe muſt be applied moderately warm.

If the piles are external and do not bleed, and the ſwelling is troubleſome, ſore and inconvenient, the following ointment is recommended.

Take of elder ointment, one ounce—of white wax, one dram—of ſugar of lead, rubbed with a ſmall quantity of oil, two ſcruples. Mix well together, and anoint the part lightly.

Or, take of the ointment of marſh mallows, one ounce—of ſugar of lead, half a dram—opium and camphire, (the latter diſſolved with oil) of each ten grains—emollient ointment, ſufficient to mix the ingredients to a light and ſmooth conſiſtence.

But perhaps the ſteam of warm water, or common poultices of white-bread and milk, may relieve thoſe complaints more ſpeedily than either of the laſt mentioned compoſitions: if they ſhould ſtill continue obſtinate, leeches may be applied to the part, or the tumors muſt be opened with a lancet, in which latter caſe the aſſiſtance of a ſurgeon will be neceſſary; but before this ſtep is taken, cloths dipped in warm ſpirits of wine may be tried, which we have often known to ſucceed when many other external applications have been uſed without effect.

As this is a diſeaſe ſo common that few people eſcape it in ſome part or other of their lives, it may be right to repeat our caution not to attempt ſtopping the bleeding haſtily, nor without due conſideration; till the diſcharge becomes exceſſive it is generally ſalutary, nor is it attended with the ſmalleſt degree of danger till the patient's ſtrength is ſo far exhauſted as to threaten hectic diſorders, an atrophy or waſting of the fleſh, or a dropſy, in one of which ways this diſorder generally terminates when it proceeds great lengths unchecked.

Nor will it be improper to mention a few of thoſe common remedies which are conſtantly within reach, when ſome of the foregoing may not be at hand; and which, though we cannot adviſe the ſame dependence on them, it will be prudent in ſuch caſes to try before better aſſiſtance can be obtained.

Boil brook-lime in a ſmall quantity of water, beat it ſmooth, and apply it warm as a poultice to the part.

A large onion ſkinned, and beaten or bruiſed, or roaſted in the aſhes, and then reduced to a pulp, and applied as a poultice.

Sit over the ſteams of vinegar wherein red-hot flint-ſtones have been quenched.

Light a bundle of matches, throw them into a deep pan, and as ſoon as the flame is extinguiſhed ſit over the ſmoke.

Take from one to two drams of flowers of brimſtone twice a day in a cup of whey or new milk.

Expreſs the juice of green nettles, make a ſyrup of it, and take from one to two ounces in a day. This is recommended for the bleeding piles; but in the uſing it, regard ſhould be had to the above cautions.

The approach of this diſeaſe may in a great meaſure be prevented by attention to food and liquors; by keeping the body open; and by avoiding colds, and particularly ſuch as are taken by putting on linen, or thoſe garments which are neareſt the part, in a damp ſtate; by ſitting long on a cold or damp neceſſary, and by wearing too thin cloaths about the lower parts of the body.

CHAP. XXXVII.

Of Aneuriſms.

AN *aneuriſm* is a tumor filled with blood, ariſing from the coats of an artery being either dilated or ruptured; arteries only are the ſeats of this diſorder, and any artery in any part of the body may be affected in this manner.

Though this diſorder is in general the ſubject of an operation of ſurgery, yet it will be of uſe to acquaint our readers with the general nature, deſcription, and ſymptoms of it, and with the treatment neceſſary previous to the operation, or when the patient is ſo circumſtanced or the diſeaſe ſo ſituated that it cannot be performed: where we may deſpair of preſcribing means to effect a cure, it will ſtill be our duty to point out ſuch as may alleviate the miſery or prolong the life of the ſufferer.

Aneuriſms are deſcribed to be of ſeveral different kinds, but we ſhall confine ourſelves to the *true* and the *falſe*, as comprehending moſt of the other diſtinctions.

The *true aneuriſm* is formed by a dilatation of the artery; it may happen in any part of the body, but moſt frequently is found in the bending of the *aorta* or great artery proceeding from the left ventricle of the heart, from which bending it runs upwards along thoſe arteries which riſe to the head, generally increaſing, till by the great diſtenſion it burſts, and the patient dies.

The degrees of the dilatation or ſtretching of the aorta in theſe caſes are various: in ſome the curve or bend of the artery hath been ſo enlarged as nearly to fill the upper part of the breaſt; and it is ſomewhat extraordinary, that the weakeſt ſpot of the veſſel, and where the diſeaſe begins, is apt to be ſtretched more in proportion than the other arteries, and to form particular cells, more where it meets firm reſiſtance than where the ſupport is ſoft and yielding.

The ſac, or bag formed by the diſtenſion of the artery, is not a diſtenſion of one particular coat, but of the whole ſubſtance of the veſſel; but as the thickneſs of the coats of theſe ſacs or bags will only laſt to a certain period, ſo when theſe coats will admit of being ſtretched no farther, the circulation grows languid, the bag becomes thinner at it's point, and ſoon after burſts; and as this tumor increaſes in ſize, the coats will be affected according to the reſiſtance it meets, and where it preſſes againſt hard ſubſtances, ſuch as tendons or bones, will be much ſooner reduced to thinneſs, than where it is only reſiſted by fibrous or more yielding parts.

The *falſe aneuriſm* is formed by a rupture or wound in the coats of the artery, and commonly happens in the arm after bleeding; in this caſe the blood flows out of the artery, and extends itſelf in the interſtices of the firmer parts, and without much pulſation forms a tumor nearer to the ſurface of the ſkin, or deeper, according to circumſtances; and the progreſs of the blood, as well as the ſize of the tumor, will vary according to the ſize of the artery which is open, and the ſtrength of the circulation.

The cauſes of aneuriſms are various. The *true aneuriſm* may proceed from a natural weakneſs in a particular part of an artery, and both kinds from ſome or other of the following: coagulations or concretions of blood which may occaſion a glut in a particular part; an impetuous circulation or a fulneſs of the arteries in concurrence with ſome ſudden and violent motion or other known cauſe; an internal abſceſs or tumor preſſing on ſome part of an artery; violent action of any kind, whether of the body in great exertions of ſtrength and unaccuſtomed exerciſe, or of the mind in exceſs of the paſſions of anger, or the like: aneuriſms may alſo be occaſioned by external injuries, ſuch as ſtrains, blows, or wounds with any pointed inſtrument; or by ſtraining in vomiting, lifting great weights, or ſuſpending the breath in running or ſwimming.

It is by no means eaſy to aſcertain the exiſtence of internal aneuriſms till they approach to the ſurface of the body, the ſymptoms produced by the diſeaſe, before it begins to form an external tumor, being ſuch in general as may be occaſioned by other cauſes; in one remarkable circumſtance they are diſtinguiſhable, which is a perceptible pulſation in ſome part of the tumor, which is more or leſs ſenſibly felt, as the ſeat of the diſorder is ſuperficially or deeply ſeated: the true aneuriſm is generally of an oblong figure, the pulſation of it is violent, and it gives way or ſubſides on depreſſion whilſt the blood continues fluid, but when it is coagulated, the effect of preſſure is leſs viſible; if the aneuriſm is of the aorta, the pulſation is ſtrong againſt the breaſt-bone and ribs on every contraction of the heart, and when it reaches above the breaſt-bone, the tumor and pulſation are more apparent.

Theſe tumors do not alter the colour of the ſkin, except when they are very near burſting, nor are they accompanied with pain: if the narrow part of the ſac or bag is towards the orifice of the artery, the blood on preſſure will re-enter the artery with a kind of hiſſing noiſe; and if the parts are expanded beyond their capacity, or the blood begins to putrify, there will be an external appearance of redneſs, attended with a degree of fever and faintneſs.

The common appearances of aneuriſms, occaſioned from arteries being wounded with the lancet in bleeding, are a diſcharge of blood through the orifice of the ſkin by ſtarts and jerks inſtead of an uniform ſtream, and upon the external orifice being ſtopped or cloſed, an inſinuation of the blood among the muſcles as far as it can ſpread in the ſhoulder and arm, which in this caſe become livid, and the blood coagulating prevents any ſenſible pulſation.

The aneuriſm of the aorta may prove fatal in a variety of ways: as it increaſes in ſize, the health becomes more and more impaired by it; it may continue many years, and that without very great apparent injury; but a cure is ſcarcely ever to be expected, though ſome few inſtances have occurred where ſmall aneuriſms, and in particular ſuch as have been occaſioned by punctures of the arteries in bleeding, have been entirely removed by the uſe of bandage.

If this ſhould not ſucceed, as is too generally the caſe, the only hopes that remain are from the operation, or from palliatives; where, from the depth or ſituation of the aneuriſmatic tumor, the former cannot be attempted, life may be conſiderably prolonged, and the patient eſcape from any violent degree of pain, by the uſe of a very moderate diet, and conſtant but extremely gentle exerciſe; his bowels ſhould be kept open, and his mind as well as his body indulged in all poſſible quiet.

Perhaps bathing the part with ſome volatile ſpirit may afford temporary relief; but in moſt caſes, of the aorta in particular, bandages muſt be avoided; in others, where preſſure is uſed, it ſhould be only ſuch as may check the force of the blood, and not actually reſiſt it; and for this purpoſe woollen cloths that will ſtretch conſiderably, ſuch as worſted ſtockings, or the like, are moſt proper: if the tumor forces it's way through the integuments and loſes it's ſupport, the aſſiſtance of a bandage is immediately neceſſary, as the only means to prevent a fatal hæmorrhage.

It is foreign to our preſent purpoſe to deſcribe the nature and proceſs of the operation, it requires the beſt attention of an able ſurgeon; nor are the united efforts of ſkill and care ſufficient to render it always ſucceſsful.

CHAP. XXXVIII.

Of Want of Appetite, Indigeſtion, Vomiting, and Coſtiveneſs.

WE have thrown theſe ſeveral complaints together in the ſame chapter, becauſe they in ſome meaſure ariſe from and are dependant on each other; and becauſe the regulations, medicines, and remedies, will be for the moſt part ſimilar.

Want of appetite, or loathing of food, may be an original or ſymptomatic diſeaſe; in the former caſe the cauſes are a bad diet, bad air, want of exerciſe, or habitual voraciouſneſs or over-feeding; it may alſo be occaſioned by ſurfeit, indigeſtion, violent paſſions, hard drinking, or immoderate uſe of ſpirituous liquors, ſnuff, tobacco, tea, or opium.

But it is alſo a common ſymptom of fevers and moſt other diſeaſes, and in thoſe caſes the cure depends on the removal of the diſorders by which the complaint is occaſioned.

When we conſider it as an original diſeaſe, air and exerciſe are the firſt remedies to be applied, and in general contribute more to the reſtoration of a loſt appetite than the beſt medicines; but it is not a bare change of air or indiſcriminate motion that can be expected to effect this purpoſe; the patient's removal ought to be to an elevated ſituation, and where he may enjoy an open and ſomewhat ſharp as well as dry air; and his exerciſe ſhould be conſtant, taken as much as poſſible abroad, and in ſuch degrees as not to occaſion fatigue, which will rather weaken his appetite than encourage it. The ſports of the field, moderately taken, are of all kinds of exerciſe beſt calculated to remove the complaint of which we ſpeak, as the attention is in general called off by them from care and intenſe thought, and the ſpirits are cheared and exhilarated, than which nothing tends more to the recovery and promotion of appetite.

The diet ſhould be light and nouriſhing, conſiſting principally of young animal food, accompanied with vegetables: he who would wiſh to recover and preſerve his appetite, muſt baniſh poignant ſauces and ſpices from his table, and confine himſelf to plain roaſt and boiled; many a good ſtomach has been ſpoiled by ragouts and fricaſees; but we may venture to aſſert, that the art of medicine does not extend to the reſtoring a vitiated appetite whilſt it continues to be tempted with high food and luxurious living.

Nor muſt we be leſs careful in the uſe of wine and other fermented liquors: of the former a ſmall quantity may be neceſſary, particularly to thoſe who have been long habituated to the uſe of it; but it ſhould be taken as a cordial, and not ſwallowed as a potion, which is actually the caſe with thoſe who drink to exceſs, and whoſe ſtomachs often refuſe the doſe which the tyrannic wine-bibber inſiſts on it's receiving.

We muſt alſo caution all ſuch as feel a loſs of appetite, as well as thoſe who wiſh to avoid this complaint, againſt the uſe of hot punch, and other warm liquors of any kind, all which tend to relax the ſtomach, and bring on a variety of diſorders; and under this head we might proceed to ſpeak of tea, but the conſideration of an article which is now become ſo very important, as well as of ſnuff, tobacco, and opium, muſt be reſerved for a ſubſequent part of the work.

If the ſtomach is oppreſſed with a ſenſe of weight, a vomit of ipecacuanha will be neceſſary, after which the following courſe of medicine will, with due regard to regimen, in moſt caſes effect a cure.

Take rhubarb powdered, and ſalt of wormwood, of each one dram and half—balſam of Peru, enough to make twenty-four pills, four of which may be taken at going to reſt twice or thrice a week.

Take tincture of ſnake-root, and the aromatic tincture, of each one ounce—acid elixir of vitriol, one dram and half. Of this mixture take two tea-ſpoonfuls every day about two hours before dinner, waſhing it down with a tea-cupful of camomile tea, or a glaſs of chalybeat water.

If the patient ſhould be low-ſpirited or hyſteric, a doſe or two of the *tinctura ſacra* or ſacred tincture, or of Rufus's pills, may be ſubſtituted for the vomit.

If the ſtomach is offended by bilious humours, twenty or thirty drops of elixir of vitriol may be taken once or twice a day in a glaſs of water; or if the loſs of appetite hath been occaſioned by exceſſive drinking, a dram of the elixir of vitriol may be added to half an ounce of the tincture of the bark, and a tea-ſpoonful of it taken twice a day as above directed; and in this caſe the ſulphurous waters of the Bath, Harrowgate, and other ſprings of the ſame quality, are recommended to be taken, wherever circumſtances admit, on the ſpots where they riſe.

If acids prevail in the ſtomach, the diet ſhould be principally confined to light animal food, as vegetables will rather prove injurious, and in theſe caſes the Seltzer or other chalybeat waters will be found uſeful; and the following medicines may be adapted to circumſtances.

Take of the ſimple bitter infuſion, one ounce and half—of the aromatic tincture, one dram. Of this mixture take two or three table-ſpoonfuls twice or thrice a day, and intermediately the following powder and julep.

Take of magneſia, one ſcruple—of precipitated ſulphur, half a ſcruple—oil of carraways, one drop. Make a powder.

For the julep—

Take of the ſtyptic tincture, two ounces—of water, ſix ounces. Of this julep take two table-ſpoonfuls, with or immediately after the powder.

To make the ſimple bitter infuſion—

Take gentian root ſliced, and the freſh rind of lemons, of each one ounce and half—of the dry ſkin of Seville oranges, half an ounce. Pour on theſe ingredients a pint of boiling water; let it ſtand till it is cold, and then ſtrain off the infuſion for uſe.

Muſtard-ſeed hath alſo been taken in the quantity of a tea-ſpoonful twice a day, and hath produced very happy effects, where the appetite hath been in a manner totally loſt; and this remedy is particularly uſeful to thoſe who are of ſtudious diſpoſitions, or are engaged in ſedentary employments: an intenſe exerciſe of the mind, and want of bodily motion, are great enemies to the appetite, and except in caſes of exceſs, it is amongſt thoſe who are engaged in works of ſcience or the fine arts that this complaint is chiefly to be met with.

The following ſtomachic wine is alſo recommended.

Take gentian root, and zedoary root, of each one dram and half, ſliced—of the leſſer cardamom ſeeds bruiſed, half a dram—of dry rind of Seville oranges, half an ounce—of ſaffron, one ſcruple. Infuſe theſe ingredients three or four days in a bottle of white wine, then pour it off fine, and take from one ounce to two twice a day.

Indigeſtion may be brought on by hard drinking, and by any of the other cauſes which occaſion loſs of appetite; it may be produced by abſtemiouſneſs or exceſs; the tone of the ſtomach may be injured by being over diſtended, and long faſting may induce a bad quality in the juices ſeparated into the ſtomach, render it feeble, and fill it with wind.

The cure will be effected by nearly the ſame means as we have preſcribed for loſs of appetite; and a ſimilar regimen, as to diet, air, and exerciſe, will be neceſſary towards the removal of this complaint.

But to the medicines which we have adviſed for the recovery of the appetite, ſome others may in this caſe be added; in particular the Columbo root will be of peculiar ſervice, when a want of digeſtion is accompanied by a nauſea and wind, which is generally the caſe: it may be either powdered, and taken in ſubſtance from ten grains to a ſcruple, twice or thrice a day, in any grateful aromatic; or an infuſion of it in Madeira wine.

Take of the Columbo root in powder, one ounce—of Madeira wine, a bottle. Let it infuſe three or four days without heat, and pour it off fine.

Two table-ſpoonfuls of this infuſion may be taken once or twice a day, according to circumſtances; but a doſe of rhubarb ſhould be given twice a week, or oftener if neceſſary.

The following pills are alſo recommended to aſſiſt digeſtion.

Take of aſafœtida, two drams—aloes, ſalt of ſteel, and ginger powdered, of each one ſcruple—of the elixir of aloes, enough to make the whole into pills of a moderate ſize, four of which may be taken night and morning.

Or the following—

Take two drams of the powder of Columbo root—ſoft extract of the gall of an ox, enough to make it into moderate ſized pills; of which two may be taken as above.

Or an infuſion of the Columbo root with muſtard-ſeed, in the following proportions.

Take of the Columbo root powdered, one ounce—of white muſtard-ſeeds bruiſed, half an ounce. Infuſe three or four days in a bottle of ſtrong white wine, and then pour off fine.

Of this infuſion take a wine-glaſsful twice a day.

But in all caſes of indigeſtion, the Bath waters are found to be of peculiar efficacy, and when aſſiſted by nervous and ſtrengthening medicines, ſeldom fail of ſucceſs.

When *vomiting* is unattended with a diarrhœa, it may be conſidered as a diſeaſe of itſelf; in which caſe it is generally accompanied by pains in the ſoles of the feet, a ſymptom which diſtinguiſhes it from the ſickneſs, nauſea, and inclination to diſcharge the ſtomach, which are commonly occaſioned by inflammation, worms, colic, gravel and ſtone, poiſons, or the like.

This diſeaſe is more frequently brought on by drinking to exceſs, than by any other cauſe; many who indulge in this vice weaken the tone of the ſtomach to ſuch a degree, that the powers of digeſtion are loſt, and it refuſes to retain the food which is conveyed into it.

The regimen muſt be ſuited to the caſe; the hard drinker muſt be allowed ſmall quantities of red wine warmed with ſpices, to which water ſhould by degrees be added till he can bear it diluted to a reaſonable proportion; his common drinks ſhould be mint tea, and his food chicken broths, light jellies, and ſago, all taken in ſmall quantities at a time.

But if the vomiting is attended by any degree of inflammation or fever, the regimen as to food and diet muſt be low, and in that caſe the wine and broths muſt be omitted.

The following medicines are adapted to the different kinds of this complaint, on which it may be neceſſary to obſerve, that ſuch of them as are of cordial compoſitions, muſt only be adminiſtered where the patient is free from feveriſh ſymptoms.

A ſto-

A ſtomachic draught.

Take of the decoction of Peruvian bark, one ounce—of elixir of vitriol, fifteen drops—tincture of Japan earth, two drams. Make a draught, to be taken twice a day.

A cordial bolus.

Take of powdered nutmeg, dried by the fire, half a ſcruple—of the cordial confection, one ſcruple—of balſamic ſyrup, enough to make a bolus. To be taken at night and repeated in the morning, waſhing it down with three or four table-ſpoonfuls of the following julep.

Take of ſimple peppermint water, ſix ounces—of ſpirituous peppermint water, one ounce and half—of ſalt of hartſhorn, two drams—of balſamic ſyrup, half a dram.

The foregoing preſcriptions are more particularly calculated for vomitings which proceed from drinking; thoſe which follow may be uſeful when this diſeaſe is occaſioned by bile.

Take of emetic tartar, from half a grain to a grain—of powdered rhubarb, from five grains to eight. Make a powder, to be taken occaſionally, waſhing it down with a tea-cupful of the decoction of Columbo root.

Take of the vulnerary balſam, two drams—of elixir of vitriol, half a dram. Of this let from fifteen to twenty drops be given two or three times a day on a lump of ſugar.

Or, take of ſimple cinnamon water, one ounce—mithridate, half a ſcruple. Mix for a draught, to be taken occaſionally.

Saline draughts, taken in the act of fermentation, and ſmall doſes of the ſweet ſpirit of nitre in ſimple mint water, may alleviate the complaint.

But when the vomiting proceeds chiefly from a prevailing acid in the ſtomach, ſcarce any medicine will afford ſuch immediate and effectual relief as magneſia; but it will be neceſſary thoroughly to waſh out the ſtomach with weak mutton, chicken, or veal broth; after which the magneſia, in quantities from a ſcruple to a dram, may be given as often as a diſpoſition to vomit occurs: when the ſymptoms are abated, the ſtomach may be ſtrengthened by the bark, bitters, and chalybeat waters.

Sea-ſickneſs hath been conſidered as rather ſalutary than prejudicial, and we apprehend the vomiting occaſioned by it is ſeldom to be appeaſed by medicine; however, when the patient has no immediate hope of getting on the land, and where this complaint is extremely troubleſome, the following mixture may be tried.

Take of freſh lemon-juice, two ounces—of ſalt of wormwood, one dram—ſpirituous cinnamon water, and ſimple cinnamon water, of each one ounce and half—white ſugar, three drams. Take three or four ſpoonfuls occaſionally.

Coſtiveneſs does not only conſiſt in the infrequency of diſcharging the excrement, but in the voiding it in ſo hard a ſtate as that it does not take it's form from the impreſſion of the rectum upon it.

Coſtiveneſs is ſaid to be generally owing to ſpaſms or contractions in the inteſtines themſelves; but various cauſes contribute to a coſtive habit: it may be occaſioned by the bile being in ſo inactive a ſtate as that it does not deſcend into the inteſtines; a prevalent acidity in the firſt paſſages; coldneſs or wet in the feet; drinking great quantities of aſtringent wines, ſuch as Port or claret; too much or too little exerciſe, and particularly ſitting long in one poſture with the body inclining forwards; working with too great an exertion of ſtrength; cold and poor food; and drinking little with meals, and large draughts after them.

A coſtive habit of body produces headachs, giddineſs, a diſagreeable taſte in the mouth, diſreliſh of food, indigeſtion, and loſs of appetite; it alſo occaſions a variety of diſorders in the ſtomach and bowels, and is in general a ſure ſtep towards chronic diſeaſes: but this habit doth not always produce the ſame effects; ſome conſtitutions can bear the want of ſtools a week, better than others a ſingle day.

In coſtive caſes, the moiſture which ought to be diſcharged with the excrements is abſorbed into the juices, and though ſome part of it may be carried off by a conſiderable perſpiration, yet the groſſer part remaining, much earthy matter is lodged in the blood, which produces various diſorders, as it happens to be thrown on particular parts.

Perſons inclined to coſtiveneſs ſhould endeavour rather to correct it by regimen than medicine; from the former laſting benefit may be derived, and the whole habit of body may by degrees be changed; but though relief may be obtained by application to medicine, it is for the moſt part but temporary, and the frequent uſe of it too often begets a neceſſity of repeating it, till at laſt Nature refuſes to perform her functions without the aſſiſtance of Art, and the patient becomes a valetudinarian for life.

Thoſe who are of coſtive habits ſhould avoid hard, dry, ſalt, and ſpiced meats; their food ſhould conſiſt of the tendereſt animal fleſh, and vegetables of a looſening quality, ſuch as aſparagus, ſpinnach, boiled water-creſſes, and other ſallads, and leeks and onions; fruits of all kinds, whether freſh or dried, dreſſed or otherwiſe, may be freely eaten, and the bread ſhould be of that moiſt kind which conſtitutes houſhold bread in the country, and which has generally a mixture of rye.

Oily food of all ſorts, ſuch as freſh butter, cream, broths, marrow, and olive oil, are peculiarly ſerviceable; and milk, in the various preparations of milk broth, whey, butter-milk, and the like, will conduce to the removal of this diſagreeable complaint.

The liquors ſhould be alſo of a ſoftening quality; mild ale, of juſt ſuch an age as will admit of it's being fine, may be ſubſtituted for Port, claret, and ſpirituous liquors; and the liquids we have juſt mentioned under the denomination of preparations of milk, may be alſo taken occaſionally, and eſpecially if the patient ſhould be inclined to drink between his meals.

The coſtiveneſs peculiar to thoſe engaged in ſtudy or ſedentary employments, will be relieved by the uſe of ſalt of wormwood, or other alkaline ſalts, and by caſtor oil; the former from half a ſcruple to a ſcruple may be taken occaſionally, diſſolved in a tea-cupful of whey or gruel; and of the latter from one table-ſpoonful to two: and where an habitual coſtiveneſs is the effect of a melancholy diſpoſition, the alkaline ſalts may be adminiſtered with great propriety, as they do not leave a tendency to the ſame habit after their operation, which is the caſe with many other laxative medicines.

Aloes have been much recommended, and ſmall doſes of the *tinctura ſacra*, or ſacred tincture, are ſaid to continue the body longer open after their being adminiſtered than moſt other purges; but we conceive that the milder opening medicines, ſuch as rhubarb, ſenna, manna, or even the lenitive electuary or the pulp of tamarinds, taken occaſionally in ſuch quantities and as often as the degree of coſtiveneſs demands, will anſwer the purpoſe better, as they may be repeated at all times when they are required, without the neceſſity of confinement or the ſmalleſt inconvenience.

Riſing early, gentle exerciſe, and the uſe of baths, hot or cold according to circumſtances, will aſſiſt conſiderably in procuring immediate relief, and even in effecting a conſtitutional change.

CHAP. XXXIX.

Of Heartburn, and Pains of the Stomach.

THE *heartburn* is by ſome deſcribed to be a pain and uneaſineſs about the upper orifice of the ſtomach; but it is more commonly felt about the pit of the ſtomach, and extends the whole length of the gullet, which is affected by a preſſure or conſtriction.

Perhaps the lower orifice of the ſtomach hath been with more propriety conſidered as the ſeat of this diſorder; for the uneaſineſs is moſtly perceived about that part of the ſtomach, where the lower orifice is placed; and it may be eaſily conceived that the other parts of the ſtomach may be affected by the pains felt in the particular ſpot laſt mentioned.

Theſe complaints generally come on by fits, and thoſe are moſt ſubject to them whoſe ſtomachs abound with acid, and thoſe who are troubled with bilious diſorders.

The cauſes of this diſeaſe are various; it may be occaſioned by wind, acid, or other acrid humours, in the ſtomach; by pungent and ſpicy aliment; by worms; by gouty or rheumatic humours paſſing to the ſtomach; by an internal ulcer; by fat food, and eſpecially if cold ſmall liquors are drank ſoon after it; by bilious matter, which is diſcoverable as well by nauſeous eructations or belchings, as by green and yellowiſh diſcharges in vomiting; or by collections of blood about the region of the ſtomach, in conſequence of an over-full habit.

It may alſo be produced by anxiety; by the paſſion of anger, particularly when exerted after meals; by ſour and ſtale liquors; by great quantities of tea and other watery fluids which relax the ſtomach; by poiſons of a corroſive nature; and in ſome inſtances it accompanies complaints of ſtones in the gall duct, or ureters.

Thoſe who are troubled with this complaint, feel an uneaſy ſenſation of pain and anxiety in the ſtomach; a heat which generally extends up the gullet; faintneſs, languor, and oppreſſion; an inclination to vomit and reachings, diſcharging only a cold watery humour; diſturbance and inquietude of mind; difficulty of breathing; coldneſs of the extremities; frequent eructations, which only alleviate the pain for a few moments; head-ach, giddineſs, trembling; a weak, intermitting, and unequal pulſe, and a pale yellow or livid countenance.

This diſorder approaches with a yawning and reſtleſsneſs; is at the height when the extremities are cold, declines as the heat returns to thoſe parts, and frequently goes off in a copious perſpiration.

Unleſs this diſeaſe is attended with conſiderable inflammation, or is the conſequence of ſome other diſorder, it is ſeldom dangerous; but if it ſucceeds a fever of the putrid kind, or following a ceſſation of pain in the gout, denotes a turn of the diſorder inwards, it is frequently a fatal ſymptom; and the like danger may be apprehended if it attends the diſappearance of foul ulcers or other eruptions in the ſkin, or comes on upon the ſudden check of a dyſentery.

Hence it will appear neceſſary, in order to effect a cure, to conſider whether this diſorder is ſymptomatic or original; if the former, the removal of the diſorder which it accompanies or attends muſt be the firſt object; and if it is an original complaint, it will be requiſite to conſult the ſymptoms, in order to fix on the immediate cauſe, before it can be determined what remedies are proper to be applied in the caſe which preſents itſelf.

The diet ſhould be light, and conſiſt chiefly of white animal fleſh, and that principally roaſted, and by no means overdreſſed; fermented liquors augment the pains, and add to the diſorder; water, in which toaſted bread hath been infuſed, or rather boiled a few minutes, and ſuffered to grow cold, may be drank alone, or mixed with a ſmall quantity of brandy, and a cup of camomile tea taken now and then between the patient's meals will ſoothe the ſpaſms or contractions of the ſtomach; and water which hath been diſtilled, lime-water, or the alkaline mineral waters, may be uſed as common drinks, as well as the water and toaſted bread.

When this complaint is occaſioned by acids in the firſt paſſages, abſorbents are the proper medicines, and of all others magneſia hath been found moſt efficacious; a tea-ſpoonful of this powder, taken in a tea-cupful of pure water or ſimple mint water, and frequently repeated, will ſcarce ever fail, not only to afford preſent relief, but to correct the acidities ſo effectually as to prevent a return of the diſorder.

The chalk julep will alſo be found uſeful in this caſe, and is perfectly agreeable to the palate, prepared as follows.

> Take of the whiteſt chalk finely powdered, one ounce—of double refined ſugar, ſix drams—of gum Arabic, two drams—water, a quart. Mix the ingredients well, and ſhake the bottle before a doſe is poured out. A tea-cupful may be taken three or four times a day.

The following powder has been alſo preſcribed.

> Take of prepared oyſter-ſhell powder, two drams—of white ſugar, two drams—of oil of cinnamon, two drops. Mix and adminiſter two or three times a day.

If the heartburn proceeds from indigeſtion as well as acids, the following medicine is adviſed.

> Take of the bitter infuſion, one ounce and half—of the aromatic tincture, one dram and half—chalybeat wine, one dram. Make a draught to be taken twice a day, at noon, and about five or ſix in the afternoon, and perſevere in the uſe of it a week at leaſt.

To make the chalybeat wine.

> Take two ounces of the filings of iron—cinnamon and mace, of each two drams—Rheniſh wine, a quart. Infuſe without heat for a month, then pour or ſtrain off the wine fine for uſe.

And in caſes where this diſeaſe is occaſioned by indigeſtion, and is attended with any degree of coſtiveneſs, the following powder may be taken morning and evening.

> Take of magneſia alba, two ſcruples—of rhubarb powdered, twelve grains—of the aromatic ſpecies, two grains. Mix well together.

The aromatic ſpecies is compoſed as follows.

> Take of cinnamon, one ounce—the leſſer cardamom ſeeds without the huſks, ginger, and long pepper, of each half an ounce. Mix and reduce them to a fine powder.

When the heartburn proceeds from a hot and acrid bile, agitated by exceſs of anger, or other violent exertion of the mind, a moderate doſe of rhubarb, manna, or ſenna, or of rhubarb and magneſia, ſhould be firſt given; and after the offending matter is by this means evacuated, half a tea-ſpoonful of the ſweet ſpirit of nitre in a glaſs of water ſhould be frequently adminiſtered, and a draught of cold water may now and then be taken intermediately; if the complaint ſhould ſtill continue violent, flannels wrung out of a warm fomentation may be applied to the pit of the ſtomach, and repeated till a general perſpiration is produced; and this treatment will be particularly uſeful when the heartburn accompanies the *cholera morbus*, or purging and vomiting.

In any of the caſes where acrid bile occaſions this diſorder, a gentle emetic may be firſt given; then opening medicines, and afterwards the ſweet ſpirit of nitre, elixir of vitriol, or Clutton's Febrifuge Spirit, in water or other ſmall liquors, will prove ſerviceable: if the heartburn has been produced by fat food, let the patient drink a cup of warm water, and take after it a table-ſpoonful or two of brandy, or other ſpirits; and if high-ſeaſoned or ſpicy food is the cauſe, frequent draughts of warm water will afford ſpeedy relief.

When this diſorder hath been brought on by an improper uſe of ſpirituous liquors, the infuſion, decoction, or tincture of the bark, with the addition of elixir of vitriol, taken before and after meals, with temperate living, moderate exerciſe, and the mineral alkaline waters, are the beſt remedies that can be offered; and when it ariſes from a weak or windy ſtomach, camomile flowers, or orange peel dried and powdered, and taken in doſes from half a dram to a dram once or twice a day, or gentle opiates, will afford relief.

When the ſtomach is relaxed by a ſtudious life, or ſedentary employment, the bark will be neceſſary, and is moſt efficacious taken in ſubſtance to the amount of half a dram, and from that quantity to a dram, two or three times a day in a glaſs of water, with a ſmall mixture of brandy; a middle ſized ſpoonful of unbruiſed muſtard ſeeds taken frequently will be ſerviceable, and warm bitters, aſafœtida, and chalybeats, will in ſome inſtances ſucceed in removing the complaint.

When it is occaſioned by worms, ſtrong violent purgatives muſt be omitted; and the patient ſhould frequently take ſmall quantities of warm milk, or diſtilled ſimple waters; and when it is produced by a ſurfeit, an emetic muſt be adminiſtered and worked off with carduus or camomile tea; if the food which ſurfeited was putrid, vinegar and other acids may be freely taken.

Where the heartburn has proceeded from poiſons, or from purges or vomits operating too violently, the ſtomach ſhould be waſhed out with warm water or camomile tea, and then warm milk, oily mixtures, and gentle opiates, will produce good effects; but though ſtrong purges will frequently bring on the diſorder, yet in all caſes of it the body ſhould be kept moderately open, as well by laxative medicines as by clyſters.

Where this diſeaſe ariſes from gouty matter thrown upon the ſtomach, warm cordials will be neceſſary to expel it, the ſtrength and quantity of which muſt be determined by the ſituation of the patient; they will however require to be repeated till the warmth of the ſtomach is reſtored.

Pain of the ſtomach is ſo nearly allied to the heartburn, being derived in general from the ſame cauſes, and producing ſimilar effects, and the means of cure being for the moſt part the ſame, that it will not be neceſſary to enlarge on this ſubject, as we have treated ſo fully of that diſeaſe.

But it may be right to remark, that ſitting a long time after meals, or immediate application to ſtudy when the ſtomach is full, will frequently produce acute pains in the ſtomach, unaccompanied with thoſe aſcending heats which always attend the heartburn; in theſe caſes, it will be adviſeable to walk at leaſt an hour after every meal, and to uſe other exerciſe early in the morning, ſuch as riding, digging in a garden, or the like.

And this complaint may alſo, in ſome inſtances, ariſe from a ſuppreſſion of accuſtomed evacuations; in which caſes bleeding may be required, according to conſtitution and habit of body; the body muſt alſo be kept open by rhubarb, manna, ſenna, and other mild laxatives; and if it has in particular attended the ſtoppage of the periodical diſcharges of females towards the decline of life, iſſues, ſetons, or other drains, will be of great uſe.

BOOK IV.

Of Chronic and Nervous Diſeaſes.

CHAP. I.

Of the Head-ache.

CHRONIC *diſeaſes* are ſuch as continue long, and are unattended by any conſiderable degree of fever; as thoſe which proceed rapidly and terminate quickly are called *acute*.

An ill-cured acute diſeaſe may ſometimes occaſion a chronical one; though almoſt all diſorders of ſlow progreſs and long continuance have been very juſtly attributed to indolence, intemperance, or vexation.

When the *head-ache* is an original diſeaſe, it unqueſtionably comes under the deſcription of being chronic; and this is the complaint of which we mean to treat in this chapter: when it occurs as a ſymptom it will be attended to in ſpeaking of the diſorders which it accompanies.

Learned diſtinctions of the various kinds of this diſorder have been made from the different parts of the head which are affected by it: when it is ſlight, and hath not continued long, it is denominated a *cephalalgia*; when it is violent and of duration, it is called *cephalæa*; when it is felt only on one ſide of the head, *hemicrania*; in one of the temples, *crotaphos*; and when the pain ſeems to gather to a point, which is generally about the crown of the head, it takes the name of *clavus hyſtericus*.

The nervous membranes of the head are generally the ſeats of this pain, though the other contents of the ſkull are alſo affected by it, as the brain, muſcles, and nerves of the head: women are more ſubject to this complaint than men, probably on account of wearing great quantities of hair and a heavy head-dreſs; and children are liable to it from irregularity and impropriety of feeding.

The origin of head-aches hath been aſcribed to variety of cauſes: very ingenious writers have ſaid, that as the motion of the blood in the head is performed through very narrow channels, the redundance and confinement of this fluid excites pain; for as the blood is naturally hot, when it is impelled by any force it cannot paſs quickly through the ſmall veſſels, where it meets with many hindrances and obſtructions, and that it is for this reaſon there is a pulſation about the temples.

This diſeaſe may be immediately occaſioned by the ſuppreſſion or diminution of accuſtomed evacuations; by the acrid matter of ſome diſeaſes fixing on any particular part of the head; by a *caries* or rottenneſs in the bones of the head; by coagulations or concretions obſtructing the paſſage of the blood through the jugular veins and ſinuſes of the brain; by ſtony concretions in the brain; by acrid humours repelled from the external parts of the head; by abſceſſes in the brain; want of ſleep; expoſure of the head either to intenſe heat or cold; by any poſture or accidental circumſtance which impels a great quantity of blood towards the head; by wet or cold in the extremities; by ſpaſms or contractions of the nervous membranes in the head; by diſorders in the ſtomach, and the faulty quality of the aliment conveyed into it; by abſtinence or gluttony; and by hardneſs or adheſion of the meninges of the brain: ſtrictures of any kind about the neck, or fixing the ſight a conſiderable time on any particular object, and thereby preventing the return of the blood from the heart, will alſo occaſion head-ache.

Some head-aches are attended with a pretty conſiderable degree of fever; in others no inflammatory ſymptoms are exhibited: when the ſuppreſſion of an uſual evacuation of blood from the noſe occaſions theſe pains, the whole head is generally affected, and becomes hot, red, and ſwelled; the veſſels are diſtended; the pulſation of the arteries grows ſtrong, eſpecially about the temples; the noſtrils are dry and parched; a heat is felt about the entrance of the throat, and is accompanied by urgent thirſt.

When a cold and ſtoppage of the noſe is the cauſe, the pain is in the fore part of the head, of a dull kind, with a ſenſe of preſſure, and ſuch a heavineſs that the patient can hardly ſupport it; and nearly the ſame ſymptoms are obſervable when it ariſes from a phlegmatic habit, in which caſe alſo the part affected ſeems cold and benumbed; and when it is produced by a hot and bilious habit, the pain is acute, and attended with a pulſation or throbbing; the head-ache which has venereal taints for it's cauſe, frequently injures the ſkull itſelf, and brings on a *caries*, or rottenneſs in the bones.

When the pain of the head is *hyſteric*, it is generally felt in a point on the crown of the head, and ſeems to the patient as if he could cover it with the top of his finger, though it is ſo ſharp that it is frequently compared to driving a nail into the head; this kind of head-ache ſometimes ſeizes the forehead juſt over the eye-brows, and ſometimes thoſe bones on the upper part of the head, which are called *bregma* or *ſinciput*, and at other times it is about the temples; but whatever part of the head it ſeizes, and however violent the pain, the extent of it is ſmall, and it rather ſeems to penetrate deep, than to ſpread ſuperficially: a ſenſation of coldneſs always attends this ſpecies of head-ache, which is the *clavus*, or *clavus hyſtericus*.

If a ſudden pain in the head without fever ſeizes hypochondriac patients, or ſuch as are of a melancholy diſpoſition, depriving them of appetite and ſleep, accompanied with a kind of deafneſs and an internal throbbing in the veſſels, madneſs may be apprehended; and when ſuch a ſeizure is followed by ringing in the ears, a weakneſs in the joints, particularly of the knees, and a faultering or interrupted ſpeech, there is danger of an apoplexy.

Violent head-aches, when they are of long continuance, produce melancholy and too often fatal effects, terminating frequently in blindneſs, deafneſs, giddineſs, apoplexy, palſy, and epilepſy; and it has been remarked, that thoſe who are much ſubject to the head-ache in their youth, are frequently attacked by gouty complaints as they advance in life.

This diſeaſe may in general be prevented, or it's violence in a great meaſure leſſened, by attention to a few very ſimple rules.

Thoſe who are ſubject to it ſhould at all times eat moderately, and at ſupper very ſparingly; the food ſhould be light, plain, and eaſy of digeſtion, and ſeaſoned, ſpiced, or highly ſauced diſhes, ſhould be carefully avoided; the liquors ſhould be ſmall or table-beer, of age enough to be fine, but not hard or ſour; ſound rough cyder, and a glaſs or two of generous wine now and then, according to habit, conſtitution, and cuſtom; ſpirits of all kinds are better avoided, but whenever they are uſed, ſhould be diluted with boiling water, but not drank till the mixture has ſtood long enough to reduce the heat to that of milk from the cow.

Thoſe who would avoid the head-ache

muſt alſo ſleep with their heads high; no cuſtom can be more pernicious than that of raiſing the lower parts of the body, and laying the head low; the blood is by this means ſent in rapid tides to the brain, from whence it returns with extreme difficulty, the circulation being checked or retarded by the poſture; hence violent head-aches, and a great variety of other ſtill more dangerous diſorders.

The body muſt alſo be kept open to eſcape from the head-ache, and as obſtructed perſpiration is frequently the cauſe of this complaint, the feet ſhould be kept warm, and free from wet or damp.

A cool regimen will be adviſeable for thoſe who labour under this diſeaſe. The diet may conſiſt principally of vegetables and fruits: of the former ſuch as are emollient and laxative; the latter ſhould be of thoſe kinds that are leaſt apt to occaſion flatulencies, and which may be dreſſed, ſuch as apples roaſted, currants in tarts, and the like; the drinks ſhould be diluting, as whey, barley-water, weak infuſion of tamarinds, herb teas, and decoctions of the woods.

Where the head-ache is occaſioned by acids or other diſorders in the ſtomach, which is the caſe in periodical pains, and thoſe which are called *hemicranias*, affecting only one ſide of the head, the cure muſt begin with gentle emetics of ipecacuanha worked off with moderate draughts of camomile tea; after the ſtomach is cleanſed, mild purges of the electuary of caſſia, caſtor oil, or the *tinctura ſacra*, or ſacred tincture, ſhould be repeatedly adminiſtered: but if theſe ſhould fail to remove the complaint, more active purges of aloes, or jalap in pills, will be required; but bleeding may be firſt tried, and this operation is particularly neceſſary when the diſeaſe is owing to an exceſſive fulneſs of blood, or to a bilious habit; opening the temporal artery is warmly recommended by ſome, whilſt others are of opinion that bleeding in the jugular vein affords more certain and ſpeedy relief; cupping and bleeding by leeches at the temples and behind the ears hath alſo been adviſed, and perhaps if a proper quantity of blood is taken away, it may not be very material how or from what particular part it is drawn; bliſters applied to the neck, behind the ears, and even over the head, have in ſome caſes been of eſſential uſe; and iſſues, ſetons, or other drains, may prevent the frequent returns of this diſorder.

In all caſes where the patient cannot conveniently loſe blood, placing the feet and legs frequently in baths of warm water will be uſeful, and the benefit will be ſtill greater, if after the bathing the extremities are rubbed with a fleſh bruſh or cloth till a degree of perſpiration is excited; if the pains are extremely violent, and remain unalleviated by any of the foregoing means, warm cataplaſms, with horſe-radiſh ſcraped and muſtard-ſeed, may be applied to the ſoles of the feet.

If this diſorder is occaſioned by ſpaſms in the lower parts, bleeding, and rubbing the extremities with volatile ſpirits, and bathing the legs and feet in warm water, will afford relief.

External applications are in many caſes of ſingular uſe; æther dropt on a linen cloth, applied to the part, and held cloſe with the hand, ſometimes gives immediate eaſe; and it was in this way, and by an eſſence differing little from æther, that Dr. Ward cured the head-ache when it was ſituated ſuperficially.

Volatile ſalts, or any thing that will irritate the noſe, may procure relief when the head-ach proceeds from a cold or ſtoppage of the noſtrils, and in particular when the pain principally affects the fore part of the head: a branch from the fifth pair of nerves ſpreads on the membrane which lines the noſtrils, and another branch of the ſame on the teguments of the forehead; hence, when the pain is in the eye-balls and forehead,

head, a heat is felt in the noſtrils, and benefit may be effected from external means applied to the membranes of the noſtrils and the forehead.

The following plaſter hath alſo been recommended to be laid over the head after it hath been ſhaved.

> Take of the common plaſter with the gums, one ounce and half—of bliſtering plaſter, two drams—of gum euphorbium, one dram and half. Mix for a plaſter.

The moſt difficult head-aches to remove are thoſe which are periodical; where this complaint is ſo ſeverely felt as to occaſion debility of body and mind, loſs of appetite, want of ſleep, and the other violent ſymptoms which we have mentioned in deſcribing the ſigns of this diſorder, our firſt attempt muſt be to alleviate the pain by gentle laxatives and opiates, after which the bark will moſt probably remove it effectually; but if that medicine ſhould fail, valerian in conſiderable doſes may be adminiſtered with very good hopes. The roots of valerian powdered may be given in the quantity of two ſcruples twice a day; but if it ſhould be diſagreeable in ſubſtance, two tea-ſpoonfuls of the tincture may be taken morning and afternoon: if, to an ounce of this tincture, a dram of the ſtrong ſpirit of vitriol is added, a tea-ſpoonful or two of the mixture taken now and then is an uſeful remedy in thoſe head-aches which affect the ſtudious, ſtrengthening the ſtomach, and relieving many windy and ſpaſmodic ſymptoms; and habitual head-aches have been conſiderably abated by the uſe of antimonial wine, taken in ſuch doſes as the ſtomach would bear, with a ſtrong infuſion of the root of wild valerian, uſing at the ſame time the cold-bath.

When pains in the head ariſe from acids in the firſt paſſages, a glaſs of warm water with twenty or thirty drops of the ſpirit of hartſhorn, may be taken occaſionally, and a doſe of magneſia and rhubarb every ſecond, third, or fourth day, according to circumſtances.

In the hyſteric head-ach, a bliſter ſhould be laid on the part, and pills of aſafœtida, and decoctions of the valerian root, taken freely. Inſtead of bliſters æther may be applied to the part, and the feet and legs bathed in warm water.

When this diſorder is occaſioned by a tranſition of gouty matter to the head, the legs muſt be bliſtered, and tinctura ſacra muſt be given to procure ſtools; after which adminiſter the following draughts.

> Take of water, one ounce and half—of the ſpirituous alexiterial water, two drams—of the cordial confection, half a dram—of ſalt of hartſhorn, from ſix grains to ten—of Virginian ſnake-root powdered, ten grains—of ſyrup of ſaffron, half a dram. Make a draught, to be taken every ſixth hour.

Such pains in the head as are ſymptomatic, can only be relieved by removing the original diſorder; if they ariſe from venereal taints, mercury is the proper medicine; if from ſcurvy or any other diſorder in which an acrimony is introduced into the juices, the means of relief ſhould be accompanied with a liberal uſe of the decoction of ſarſaparilla.

When the cauſes of this complaint are a weak ſtomach and relaxed nerves, joined with anxiety or uneaſineſs of mind, the Spa waters, gummous pills, and exerciſe on horſeback, ſeldom fail of giving relief.

If the head-ache, from whatever cauſe it ariſes, ſhould be ſo intenſe and of ſuch continuance as to occaſion that degree of watchfulneſs which ends in delirium, or the patient's life is in danger, clyſters and purges ſhould be firſt adminiſtered, and afterwards opiates both internally and externally; the latter may conſiſt of Bate's anodyne balſam rubbed on the part, and the former may be from ten to twenty drops of liquid laudanum, taken once or twice a day in a tea-cupful of any ſimple water or valerian tea.

Of Bate's anodyne balſam the compoſition is as follows.

Take of the ſaponaceous liniment, three ounces—of liquid laudanum, one ounce. Shake the bottle well before the mixture is uſed.

And the following is the ſaponaceous liniment.

Take of the ſpirit of roſemary, four ounces—of hard Spaniſh ſoap, one ounce—camphire, two drams and half. Mix theſe ingredients well.

But this courſe of opiates will only be proper in caſes of extreme pain, and ought always to be accompanied and followed by proper evacuations.

Preſcriptions for the cure of head-aches, of all kinds and in all degrees, are to be met with in every family, and to be learned from every nurſe in Great Britain; and though all theſe preſcriptions cannot be infallible, yet there are many of them not to be deſpiſed; they may in ſome inſtances afford preſent relief, and whoever has endured ſevere attacks of theſe complaints, will readily allow great merit to ſuch remedies as do but even procure a temporary ſuſpenſion of ſuch acute and excruciating pains.

Apply to each temple the thin yellow rind newly cut off a freſh lemon. Let the patient wet it with his tongue; it will ſtick, and ſoon occaſion a redneſs of the part, and ſometimes a bliſter.

Pour into the palm of the hand a little brandy, and the zeſt of freſh lemon ſkin, and hold it to the forehead.

If the head-ache is occaſioned by a cold—

Boil a handful of roſemary in a quart of water; pour the whole into a large cup, and covering the head with a napkin, let the ſteam be received on it as hot as it can be ſuffered, placing that part of the head which is principally affected ſo as to take the greateſt part of the ſteam as it ariſes.

Snuff up the noſtrils camphorated ſpirit of lavender, or the juice of horſe-radiſh.

Grate half a nutmeg, make it into a bolus with brandy, and take it whilſt the pain is violent.

For a head-ache of long continuance—

Take a tea-cupful of carduus tea, without ſugar, every morning for a fortnight.

For a nervous head-ache—

Take the dried leaves of aſſarabacca, or wild nard, Syrian maſtich, thyme, and dried lavender flowers, of each equal parts; mix and make them into a powder. Of this ſnuff a ſmall pinch up the noſtrils every other night at going to bed, keeping the throat and ears warm.

For the hemicrania—

Shave the affected part of the head, and apply to it a common adheſive plaſter, in the middle of which a hole is cut about the ſize of a ſhilling; bruiſe the leaves of ranunculus very much, and place them over the hole in the plaſter; this will ſometimes raiſe a bliſter.

CHAP. II.

Of the Tooth-Ache and Fœtid Breath.

THE *tooth-ache* is ſo univerſally felt and known, that the ſymptoms need not be deſcribed; it may be occaſioned by an impure humour corroding the membranes and nerves, or may follow rheumatic complaints, to which it bears great affinity: it may alſo ariſe from obſtructions and inflammations of the nerves and veſſels of the teeth themſelves; from the teeth being expoſed to the air; by the gums loſing their hold, owing to ſcurvy or venereal diſorders; from hot liquors, which deſtroy the enamel and admit the air to the bony part; from picking the teeth with pins and other hard inſtruments, which produce the ſame effect; from colds in the head, occaſioned by obſtructed perſpiration, and ariſing from imprudently ſitting with the ſide of the head againſt doors, windows, or crevices in the wainſcot; and all or any of theſe cauſes may produce a rotten tooth, which ſcarce ever ceaſes to be an aching one, and in this caſe the ſooner it is extracted the better.

But in other caſes the extraction of teeth ought not to be undertaken wantonly or haſtily; the tooth where the pain is felt may not be diſeaſed: it is not unuſual for the real pain to iſſue from a diſorder in another tooth ſeated perhaps on the contrary ſide of the ſame jaw, or even in the oppoſite; this is frequently the caſe, nor will it appear extraordinary to thoſe who are acquainted with the ſympathy of the nerves in the human conſtitution.

Or the diſorder may be ſeated in the correſpondent gum, or be owing to the inflammatory ſtate of the ſurrounding veſſels; in either of which caſes it ſeldom fails to be conſiderably aggravated by the diſtenſion of the ſocket of the jaw, and by that laceration of the gum which neceſſarily attends drawing the tooth.

Whoever, therefore, under either of theſe circumſtances, is induced to ſubmit to the operation, will find himſelf rather injured than benefited: in the former caſe he will have the mortification to reflect, that he has loſt an uſeful tooth, and is ſtill to endure the pain; and in the latter he will have exchanged a tooth which might perhaps have been preſerved, for an abſceſs in the jaw, a fever, or an impoſthume.

Yet there are many caſes in which the operation of extracting the tooth may not only be judiciouſly and properly recommended, but may be abſolutely neceſſary to be performed: ſuch as where the tooth hath long been carious or rotten; for then the nerve being expoſed to the air, is of conſequence always liable to become painful, and the extraction is unavoidable, if the perforation into the rotten cavity is too large to admit of being filled with gold, lead, or wax, ſo as to anſwer any good purpoſe; for when the cavity in the tooth is large, if any foreign body is introduced, the preſſure on the nerve is proportioned to the ſuperficial extent of that body, and conſequently when that is large it could not be endured.

Yet, notwithſtanding it may in ſuch caſes be neceſſary that the tooth ſhould be taken out, yet in many inſtances relief may be obtained by gentle means without incurring a loſs, which not only deprives the ſufferer of an ornament, but frequently proves prejudicial to his ſpeech, and ſubjects him to inconvenience in maſtication.

To procure relief without extracting the tooth, the humours muſt be drawn off from the part affected by gentle laxative medicines,

cines, by bleeding the gums either by ſcarification or leeches, and by immerſing the lower extremities in baths of warm water; and the fever which uſually accompanies this complaint muſt be kept under, by exciting gentle perſpiration with diluting liquors, and by a ſuitable regimen as to food.

If the pain and inflammation ſhould reſiſt theſe endeavours, bliſters may be applied behind the ears, and an emollient gargariſm ſhould be frequently held in the mouth as warm as it can be endured; and this will alſo be of uſe if there ſhould be a tendency to ſuppuration, which may be farther promoted by a roaſted fig, held againſt the painful part of the gum within the mouth, and poultices of boiled camomile or elder flowers applied to the cheek externally, which muſt not be ſuffered to remain after they grow cold, but muſt be renewed as often as that happens.

The tooth-ache is ſaid to admit of a cure by introducing a red-hot iron wire into the hollow part and burning the nerve, and afterwards filling the cavity with lead, wax, or gum, or by touching that part of the ear which is called the *antihelix* with a hot-iron; but theſe are operations of which we cannot vouch the ſucceſs, and therefore do not recommend them as approved ſpecifics, nor would we adviſe our readers to truſt the performance of them to unſkilful hands.

The ſteams of warm liquids, received into the mouth from the ſpout of a large teapot, or by holding the head over a veſſel filled with hot water, may give eaſe, eſpecially if the pain is occaſioned by a cold.

Relief may in ſome caſes be procured from the uſe of opiates, and the following forms have been recommended.

Take camphire and opium, of each ten grains. Of this make eight pills, one of which may be put into the cavity of the decayed tooth, and repeated occaſionally.

Or, take of the root of pellitory of Spain bruiſed, half an ounce—opium and camphire, of each two drams—rectified ſpirits of wine, eight ounces. Digeſt in moderate heat for four or five days.

Apply a few drops of this tincture on a doſſil of lint to the aching tooth or gums, and repeat it as the violence of the pain may require; or a drop of the oil of cloves, or of peppermint, on lint, may anſwer the ſame purpoſe; and where the fever is conſiderable, it will be right to omit the opiates, and to ſubſtitute the remedies laſt mentioned, which will alſo be uſeful when this diſeaſe accompanies pregnancy, of which it is a very common ſymptom.

Whatever promotes the diſcharge of ſpittle, will contribute to the patient's eaſe; and various roots are recommended for this purpoſe, ſuch as gentian, *calamus aromaticus*, or Aſiatic ſweet flag, pellitory of Spain, or the root of the common yellow flower de luce, a piece of which may be gently rubbed upon the gum, or a bit of it chewed; but on account of it's very acrid quality, ſhould be ſparingly uſed.

A bit of opium of the ſize of a ſmall pea, confined by a piece of ſticking plaſter to the temporal artery, on the ſame ſide of the head with the aching tooth, is ſaid to be infallible in procuring preſent eaſe.

This complaint is ſometimes of the rheumatic kind, occaſioning wandering pains in different parts of the head, jaws, and face; in theſe caſes the bark will be ſerviceable in the following form.

Take the bark powdered, one dram—of gum guaiacum powdered, half a dram—of the diuretic ſalt, one ſcruple—of balſam of guaiacum, enough to make the whole into twenty-four pills; of which three may be taken night and morning, waſhing them down with three or four ſpoonfuls of the camphorated julep, prepared with water.

The camphorated julep may be made as follows.

Take of camphire, one dram—of double refined ſugar, half an ounce—of boiling water, a pint. Grind the camphire with a little rectified ſpirit of wine till it is ſoftened, and then with the ſugar till they unite perfectly; add the water by degrees, continuing to ſtir it in the mortar till the whole is thoroughly mixed; and when the mixture has ſtood in a veſſel cloſely covered till it is cold, ſtrain it off. This julep may be improved by mixing the camphire with double the quantity of gum Arabic; and in this way vinegar may be added inſtead of water, which in putrid diſorders is preferable.

To make the balſam of guaiacum—

Take of gum guaiacum, four ounces—of balſam of Peru, one dram—rectified ſpirit of wine, ſix ounces. Mix well together.

But without attention to the great article of cleanlineſs about the teeth and gums, medicine will be adminiſtered in vain; not that we mean to recommend the uſe of inſtruments or dentifrices; both are equally pernicious: ſcaling the teeth frequently deſtroys the enamel, and lays the bone bare at once, and the corroſive quality of the dentifrice produces the ſame effects by ſlow but ſure degrees. If the mouth and teeth were carefully waſhed after every meal with water, cold in the ſummer, and a little warm in the winter; and if once every day the teeth and gums were well cleaned with a ſoft bruſh, dipped in water only; tinctures, dentifrices, and ſcaling inſtruments, would be unneceſſary, nor would the complaint of aching teeth be ſo frequent. It is ſomewhat aſtoniſhing, to find perſons who practiſe every act of cleanlineſs, and even delicacy, in every other part of their perſons, ſo totally inattentive to the care of their mouths and teeth, as to forfeit by their neglect the bleſſings of eaſe, and loſe one of the greateſt ornaments of the face!

Nor does the evil conſiſt only in a diſagreeable appearance, or inconveniencies ſuffered by the parties themſelves; thoſe who permit their teeth and gums to become foul, commit an offence againſt decency.

For a *fœtid breath* is much oftener the conſequence of rotten teeth and diſeaſed gums than of any internal diſorder, and thoſe who have occaſion to mingle a great deal with the world, ſhould have peculiar regard to this circumſtance, as the moſt beautiful face will be deformed by exhibiting foul or bad teeth, and wit itſelf will loſe it's effect, when the utterance of it is accompanied by putrid exhalations.

A fœtid breath may in ſome caſes proceed from a foul ſtomach or diſeaſed lungs; in both theſe caſes the cauſe muſt be removed by application to ſuch remedies as are adapted to the particular diſorders by which it is occaſioned: when it has been produced by mercurials, it will hardly ever be got the better of till regimen and alteratives have affected a total change in the habit of body.

This diſagreeable complaint may in ſome inſtances be conſtitutional, and in theſe caſes will very rarely admit of remedy; but though it cannot be wholly cured, it may be alleviated by ſtrict attention to cleanlineſs, by avoiding ſuch food as is apt to turn ſour and rancid in the ſtomach, and by refraining wholly from the uſe of ſpirituous liquors, the ſmalleſt quantity of which will contribute to render intolerable a breath naturally offenſive.

A paſte or lozenges of the following compoſition, kept frequently in the mouth, will aſſiſt in correcting a fœtid breath, or at leaſt prevent it from being highly injurious to others.

Take angelica root and orris root, of each half a dram—coriander ſeed, and the ſeeds of the leſſer cardamom, of each a dram. Reduce the whole to a powder, and make it into a paſte with roſe water in which a ſmall quantity of gum Arabic hath been diſſolved; this paſte may be cut into any form, and dried as lozenges.

CHAP.

CHAP. III.

Of Hoarſeneſs and Loſs of Voice.

A *Hoarſeneſs* is a diminution of the ſounds of the voice, attended with an unuſual aſperity or roughneſs; and the upper parts of the windpipe are thoſe which are principally affected.

It may be occaſioned by a defluxion of acrid and viſcid humours, and a copious effuſion of thin matter upon the upper parts of the windpipe; from a tumor or inflammation in or about the ſame part; from a dryneſs of the muſcles ſubſervient to the purpoſes of ſpeech; or from the ſpittle becoming thick and glewy, and rendering the ſurface of the throat rough and unequal: and this complaint ſometimes ariſes from puſtules of ſmall-pox about the entrance of the windpipe.

In the firſt caſe half a tea-ſpoonful of the juice of horſe-radiſh may be mixed with half a pint of whey ſweetened with honey, and taken every morning; and when the defluxion is particularly ſharp, ſmall quantities of the powder of gum tragacanth and ſtarch, or of Japan earth, may alſo be taken in new whey.

When a hoarſeneſs proceeds from tumor or inflammation, the following gargariſm will be found uſeful.

> Take of the decoction of the leaves or root of marſh mallows, ſix ounces—of the volatile ſpirit of ſal ammoniac, thirty drops. Mix for a gargle, and ſhake the bottle before it is uſed.

When the hoarſeneſs ariſes from a dryneſs of the muſcles, the ſweet ſpirit of nitre or other acid attenuants, with diluting liquors, will generally relieve; and ſuch lubricating drinks as tend to facilitate the paſſage of the variolous matter through the ſkin, will be of uſe when this complaint occurs in the ſmall-pox: and diluting liquors will be equally ſerviceable where it is produced by the thickneſs and viſcidity of the ſpittle.

The *loſs of voice* is occaſioned principally by the diminution or total obſtruction of the nervous fluid through the nerves deſtined for the motion of the tongue: hence a palſy of the tongue, which precedes or is the conſequence of a hemiplexy or paralytic ſtroke, affecting one ſide of the body; or of an apoplexy, which is a total privation of ſenſe or motion; requires the utmoſt attention.

When a loſs of voice appears alone, it beſpeaks the approach of one of thoſe diſorders; if it ſuceeeds either of them, and is accompanied with a defect of memory, and the powers of the mind ſeem impaired, a return may be apprehended: it is always a troubleſome and obſtinate diſeaſe, though ſomewhat leſs ſo when the branches of the fifth pair of nerves which run to the tongue are only compreſſed by a ſtagnation of ſerous humours.

This diſorder may likewiſe ariſe from eruptions on the ſkin being ſuddenly repelled; by collections of blood under the tongue, or in the entrance of the gullet; by the obſtruction of periodical evacuations in full habits; by ſpaſms; by worms; by a crumb of bread, or other hard ſubſtance, falling into the upper part of the windpipe; by a ſudden operation of fear; or by an improper uſe of ſpirituous liquors.

To effect a cure, our endeavours muſt be directed to remove whatever obſtructs the flow of the nervous fluid into the tongue, and then to ſtrengthen the weakened parts.

When this diſorder proceeds from eruptions of the ſkin being repelled, the patient's tient's drinks ſhould be warm; and ſuch medicines are to be given as promote perſpiration, and ſmall quantities of ſpirit of hartſhorn with amber, or the antimonial wine, may be mixed with the vulnerary balſam, or balſam of Peru, and given to the amount of fifteen or twenty drops on a lump of ſugar, or in the common drink.

If it ariſes from collections of blood, bleeding and nitre, with other antiſpaſmodics, will be neceſſary; and medicines of the latter kind may alſo afford immediate relief, if the diſeaſe is occaſioned by worms; but in that caſe no cure can be expected till the worms are deſtroyed.

If ſpaſms or contractions about the tongue or entrance of the throat are the cauſes of this diſorder, external anodynes may be uſeful; and for this purpoſe Bate's anodyne balſam may be gently rubbed over the part, or it may be bathed with flannels wrung out of the following fomentation.

Take of the heads of poppies bruiſed, two ounces—elder and camomile flowers, of each an ounce. Boil theſe ingredients in a quart of water twenty minutes, then ſtrain it, and add of diſtilled vinegar, ſix ounces—of ſpirit of ſal ammoniac, one ounce. Mix, and warm it for uſe.

Bate's anodyne balſam is made as follows.

Take of the ſaponaceous liniment, ſix ounces—of liquid laudanum, two ounces. Shake them together.

To make the ſaponaceous liniment—

Take of the ſpirit of roſemary, half a pint—of hard Spaniſh ſoap, one ounce and half—of camphire, half an ounce. Let the ſoap diſſolve in the ſpirit, and then add the camphire. This is alſo called opodeldoc.

When this diſeaſe proceeds from a palſy of the tongue, bleeding and gentle purges will be neceſſary according to the habit of body, the anodyne balſam may be applied externally, and warm nervous medicines may be adminiſtered internally; for this purpoſe the following forms are offered.

Take of caſtor, one ſcruple—of ſaffron, ſix grains—of the aromatic ſpecies, three grains—of confection of kermes, commonly called alkermes, enough to make a bolus. To be taken every fourth or ſixth hour, ſwallowing after it three or four ſpoonfuls of muſk, or camphorated julep.

The following ſaline draught may alſo be uſeful.

Take of pure water, one ounce—of freſh lemon-juice, half an ounce—ſalt of wormwood, and the cordial confection, of each one ſcruple—balſamic ſyrup, one dram. Make a draught, to be taken every ſix hours.

In this caſe alſo, bathing the feet in warm water, and the frequent injection of carminative clyſters, will be ſerviceable. For the clyſter—

Take of camomile flowers, and elder flowers, of each half an ounce—of aniſeeds, half an ounce. Boil in a pint and half of water till it is reduced to a pint.

That deprivation of voice, or rather ſpeech, which ſucceeds the ſhock of a partial palſy or an apoplexy, ſeldom admits of relief, except from bliſters applied to the nape of the neck.

CHAP.

CHAP. IV.

Of the Jaundice.

THE *jaundice* is a vitiated ſtate of the blood, from the bile returning or being abſorbed into it, injuring the functions of the body, and rendering the ſkin yellow, and in ſome inſtances almoſt black.

The cauſes of this diſeaſe may be a ſchirrhous or inflamed liver; gall-ſtones obſtructing the paſſage of the bile into that inteſtinal part which is called the *duodenum*; the mixture of the bile with the blood; and by whatever cauſes the gall-ſtones to enter the biliary paſſage, ſuch as violent paſſions, ſtrong purges or emetics, and the like.

This diſeaſe is alſo ſaid to be occaſioned by colds, by the ſtoppage of uſual evacuations or drains, and by the want of purging off the *meconium* in infants; and is alſo deſcribed as a ſymptom attending ſeveral ſorts of fevers, and to take place in ſome inſtances after agues have been prematurely and injudiciouſly ſtopped by aſtringent medicines: but whether the yellowneſs of the ſkin in thoſe caſes, or that which appears in conſequence of the bites of vipers, and other poiſonous animals, is a deciſive ſymptom of the jaundice, admits of ſome doubt.

The ſymptoms of the jaundice are inactivity, anxiety, wearineſs, ſickneſs, vomiting, wind, oppreſſion at the breaſt, and difficulty of breathing; uneaſineſs at the pit of the ſtomach; and an itching or pricking, like that which ſucceeds a ſleeping or benumbed limb, is felt all over the body.

At the ſame time the whole ſkin and the whites of the eyes turn yellow, the urine aſſumes the ſame colour, and depoſits a copious dark ſediment; the ſtools, which are few, are white or greyiſh; and the patient complains of a bitter taſte in the mouth, and all objects have a yellow caſt.

As the colour of the ſkin grows darker, and approaches nearer to black, this diſeaſe becomes dangerous; it is ſeldom ſo whilſt the yellow colour remains, except in caſes of ſchirrous livers, or when perſons advanced in years have had a long continuance or frequent returns of it, or unleſs it is complicated with other diſorders, when it ſometimes proves fatal.

The food ſhould be cooling, ſoftening, and opening; vegetables, fruits, and broths, are moſt adviſeable; and the drinks ſhould alſo poſſeſs the ſame qualities, and conſiſt of infuſions and decoctions of emollient herbs and whey, or other preparations of milk: during the whole diſorder the patient ſhould uſe as much exerciſe as he can endure without much fatigue, and the warm bath, chearful company, and innocent amuſements, will very conſiderably contribute to his recovery.

If feveriſh ſymptoms in the beginning of this diſorder afford reaſon to apprehend an inflammation of the liver, and eſpecially if the patient's habit of body is full and ſanguine, bleeding will be neceſſary; and the quantity of blood to be taken away, as well as the repetition, muſt depend on the age and ſtrength of the patient, and other circumſtances. After this operation, emetics will be of ſingular uſe, and thoſe of the antimonial kind are to be preferred where there is no immediate appearance of inflammation; for this purpoſe a grain or two of the emetic tartar will be ſufficient, though ſome adviſe half a dram of the powder of ipecacuanha, worked off with a few draughts of camomile tea.

After the emetic, the following purges may be adminiſtered according to the ſymptoms.

Take of the infuſion of ſenna, two ouces—of tincture of ſenna, and vinous tincture of rhubarb, of each three drams. Mix for a draught.

Or, take of alkaline aloetic wine, three drams—of pennyroyal water, two ounces—ſpirituous tincture of rhubarb, one dram. Make a draught, to be taken at going to reſt.

To make the alkaline aloetic wine—

Take of ſalt of tartar, ſix ounces—of ſuccotrine aloes, Engliſh ſaffron, and myrrh, of each half an ounce—of crude ſal ammoniac, three drams—of mountain wine, a pint. Let theſe ingredients infuſe about a week without heat, ſhaking the bottle frequently, and then pour off the clear liquor for uſe. The myrrh and ſaffron ſhould be added to the wine two or three days before the other ingredients.

But if this diſorder is occaſioned by a mere redundancy of bile, which may be known by the high colour and ſtrong and acrid ſmell of the ſtools, the gentler laxative medicines, ſuch as manna, the pulp of tamarinds, or caſtor oil, will be proper; and in this caſe acids and demulcents will aſſiſt.

Caſtile ſoap hath been alſo recommended in this diſeaſe, either alone, in quantities ſufficient to open the body, or in the following pills.

Take of the beſt Caſtile ſoap, two drams—of powdered ſquills, one ſcruple and half—magneſia and rhubarb in powder, of each half a dram—of ſyrup of marſh mallows, enough to make theſe ingredients into forty pills, three of which may be taken twice or thrice a day, drinking after each doſe from one ounce to two of the following vinous tincture.

Take turmeric root powdered, and tincture of madder, of each one ounce—of freſh millepedes or wood-lice bruiſed, half an ounce—of the *canella alba*, or of Winter's bark, two drams. Digeſt the whole twenty-four hours in three pints of Rheniſh wine, and then pour or ſtrain it off fine.

But it is the opinion of ſome, that all the advantages of ſoap, without it's diſagreeable taſte, may be obtained from the diuretic ſalt; which is ſtill more uſeful when any feveriſh heat attends, allaying thoſe accidental ſymptoms, whilſt it carries on the main object, the cure of the diſorder.

This medicine may either be given to the quantity of a dram, or a dram and a half, according to age and other circumſtances, twice or three times a day, in a teacupful of any of the patient's common drinks, or uſed inſtead of the ſalt of wormwood in a ſaline draught.

Take of pure water, one ounce and half—of freſh lemon-juice, half an ounce—of the diuretic ſalt, one dram—of ſpirituous alexiterial water, two drams—of ſyrup of marſh mallows, one dram. Make a draught, to be taken every ſix or eight hours, according to the nature and violence of the diſeaſe.

If an hæmorrhage ſhould accompany this diſorder, it ſhews that the blood is in an acrid or diſſolved ſtate, and therefore aloes and other attenuants ſhould be avoided, and acids and demulcents ſubſtituted; caſtor oil adminiſtered in the form of an emulſion, and decoction of hemp-ſeed boiled in milk, will be uſeful. To make the decoction of hemp-ſeed—

Boil two ounces of the ſeed ten minutes in a quart of new milk, then pour or ſtrain off the milk, and ſweeten it with honey to the patient's taſte. A tea-cupful of this decoction may be taken twice a day.

This decoction will alſo be proper when the jaundice is attended with any conſiderable degree of fever.

If the itching or pricking in the ſkin ſhould be ſo troubleſome as to deprive the patient of his reſt, a few drops of liquid laudanum may be added to ſuch of his medicines or common drinks as are taken laſt before going to bed.

The waters of Bath and Harrowgate are eſteemed ſpecifics in this diſeaſe; and they are certainly more efficacious when they are drank on the ſpots where they riſe, than when they have been bottled and carried to a diſtance; but if the patient cannot conveniently drink the waters at the fountain-head, thoſe of Harrowgate are to be preferred.

Of the various common preſcriptions for the cure of this diſeaſe, the following are offered, though perhaps others of equal merit may have been omitted; indeed the catalogue is ſo large, that not one in ten can be ſelected.

Eat as many raw eggs as the ſtomach will bear without ſickneſs, for ſeveral days,

Wrap the feet in the leaves of celandine.

Boil three ounces of burdock root in two quarts of water, till it is reduced to three pints. Drink a tea-cupful of this decoction every morning.

Beat the white of an egg till it becomes thin, and take it in a glaſs of water morning and evening.

Boil two ounces of the ſecond or yellow bark of the barberry tree in two quarts of water, till it is reduced to three pints. Of this decoction take a wine-glaſsful twice a day; it may be rendered palatable by acids and ſugar.

CHAP. V.

Of the Aſthma.

THE *aſthma* is a diſeaſe which takes it's name from principally affecting the breath, and is of two kinds; the *pituitous*, *humoural*, or *moiſt aſthma*; and the *ſpaſmodic*, *convulſive*, or *dry aſthma*.

Perſons of full and ſanguine habits of body, and who are ſtrait or narrow cheſted, are moſt ſubject to this diſorder, which attacks perſons of all ages, but commonly thoſe who have paſſed the prime of life.

The cauſes of this diſorder may be ſuch a conformation of body as we have juſt mentioned; defects in the lungs, or parts ſubſervient to the purpoſes of reſpiration; a preternatural ſize of the lungs; tumors, and particularly thoſe of the windy kind, on theſe organs; a redundancy of blood; or a defect of the vital fire in the lungs.

It may alſo be occaſioned by a diminiſhed perſpiration, or a ſudden check to that evacuation; by mineral or metallic fumes received into the lungs; by acrid defluxions; by cold north winds affecting the diaphragm with a ſpaſmodic ſtricture; by the imprudent repulſion of the morbid matter of eruptive diſorders; by gout being checked in the extreme parts, and the matter falling upon the lungs; by the ſtoppage or obſtruction of accuſtomed evacuations or drains, ſuch as old ulcers, iſſues, or ſetons; by violent exerciſe, or extraordinary emotions of the mind; or by whatever prevents the free circulation of the blood through the lungs, or obſtructs their due expanſion.

In the approach of this diſorder the patient is ſeized with an oppreſſion of the breaſt, a diſinclination to any kind of exerciſe or motion, and a wearineſs after the ſmalleſt exertion: his breathing is ſhort and laborious; he is ſeized with a cough and hoarſeneſs; is troubled with wind in the ſtomach; and plagued with uneaſy, hot, and four eructations; he loſes his ſleep and grows reſtleſs in his bed, though he does not complain of any conſiderable degree of heat; and his noſtrils are contracted ſo as not to admit of eaſy reſpiration.

As the diſorder gains ground, the cheeks grow red; the eyes prominent, like thoſe of perſons under ſtrangulation; the patient ſnores even when awake, though much more loudly whilſt he ſleeps; his voice is languid, tremulous, and indiſtinct; he ſeeks a free and cold air, and ſhuns the houſe, as too narrow and confined a ſpot for breathing; he holds his head erect when he reſpires, gaſps at the air with open mouth, and ſeems eager to draw in a larger quantity than he is capable of receiving; though his cheeks are fluſhed, the other parts of his face are pale; ſweats break out upon his forehead and neck; he is tormented with a ſharp and unceaſing cough, and expectorates only a very ſmall quantity of thin, cold, and frothy matter; in breathing, his neck ſwells, and his breaſt and ſtomach ſeem drawn in and contracted; the pulſe is ſmall, quick, and low; the legs become ſlender and emaciated; and coſtiveneſs is a general attendant: if theſe ſymptoms increaſe with violence, the patient ſtruggles miſerably a ſhort time, and then dies in a ſuffocation.

Other ſymptoms, though more rarely, attend this diſeaſe: in ſome inſtances the patient is afflicted with tumors or ſwellings in the face, hands, feet, or back; a torpor or numbneſs ſeizes his arms; lead-coloured ſpots are perceived on his face; and a ſlight, irregular fever approaches in the morning, and increaſes towards night. Theſe ſymptoms lead to ſome kind of dropſy, or ſometimes terminate in a partial or univerſal palſy.

In the *dry aſthma* the patient is ſomewhat at eaſe in the intervals between the fits of coughing, but in the pituitous or moiſt kind, he is ſeldom free from ſome or other of the ſymptoms, though they are at ſome times leſs aggravated than at others; they are particularly augmented by eaſterly winds, which occaſion an increaſed expectoration of phlegm.

The favourable ſigns are, when the cough becomes leſs conſtant, or returns at longer intervals; when a moiſt ſpittle is freely thrown off; when the ſtools are copious and watery, and large quantities of urine are diſcharged: as the cure becomes more probable, the tone of the voice will be reſtored; nature will be ſupported by comfortable ſleep; the patient's breaſt will be relaxed and become eaſy; the pains will remit and ſhift to the ſhoulder-blades; and he will breathe more freely and at longer intervals, though ſtill with a degree of roughneſs. As the diſorder abates, the urine becomes higher coloured, and drops a very conſiderable ſediment.

When this diſorder has not been of long continuance, and when it has been produced by the falling in of gouty or eruptive matter, hopes may be entertained of perfect recovery; and an evacuation of blood from the hæmorrhoidal veſſels, or a return of female periodical diſcharges, during a fit of aſthma, alleviate the complaints conſiderably: but in convulſive aſthmas, the patient's life is in extreme danger at every return, and where the fits are frequent and of long continuance, if the patient eſcapes with life from the aſthma, he generally falls into a dropſy, and meets deſtruction from that diſeaſe; if a ſlow fever comes on with an unequal or intermitting pulſe, a palſy in the arms, palpitation of the heart, a ſuppreſſion or very ſmall diſcharge of urine, and faintings, death is at hand.

Though this diſeaſe attacks all ages and conſtitutions, yet in different ages and habits it has very different effects; the young and the vigorous frequently get through it; but when it ſeizes on ſuch as are advanced in years, it generally accompanies them through life.

In this diſeaſe great regard is due to regimen; the patient's food ſhould conſiſt of broths, ſuch vegetables as are of a ſoftening emollient quality, and the youngeſt animal food, fruits, pyes, and puddings; the ſuppers ſhould be of ſpoon-meats only, though the omiſſion of them wholly will be of advantage; the patient's drinks may be Seltzer water, with a mixture of Rheniſh wine, muſtard whey, or infuſions of ground-ivy, daiſy flowers, hyſſop, or Paul's betony ſweetened with liquorice.

Exerciſe will contribute greatly to the patient's relief, and aſſiſt the impeded action of the lungs; but it ſhould be taken regularly and cautiouſly, on horſeback or in an open carriage, if the patient's ſtrength or the weather will permit, but he ſhould by no means be expoſed to a moiſt, damp, or very ſharp air.

The patient's cloathing ſhould at all times be rather warmer than uſual; he ſhould wear woollen ſtockings, and ſuch ſhoes as will effectually ſecure his feet from wet or even damp; and a flannel ſhirt next his ſkin will promote perſpiration, and conſequently tend to his eaſe and recovery.

The moſt important of all objects in our endeavours to relieve an aſthmatic patient, is to place him in that air wherein he appears to breathe with the greateſt degree of freedom; for, according to certain conſtitutional circumſtances, ſome are eaſy only in the dry and ſerene air of ane levated ſituation in the country, and others derive benefit from the moiſt and vapid atmoſphere of great towns: the latter caſe, however, is much leſs common than the former, and perhaps if the patient is removed from the ſmoak, the air may be ſoftened by the contiguity of a town, and rendered more fit in moſt caſes for weak or diſordered lungs.

But if the air of the town diſagrees, attempts to remain in it will generally be fatal; and if the patient's engagements are of ſuch a nature that he cannot relinquiſh it entirely, he ſhould at leaſt contrive to ſleep in the country, the night air of towns being from a variety of circumſtances more noxious than that of the day, and the breathing of the aſthmatic patient during his ſleep being much more liable to be affected than when he is awake: inſtances have not unfrequently occurred, where perſons who have appeared to be in the laſt ſtages of aſthmas, have not only received relief, but perfect recovery, from the air of a warmer and more equal climate on the continent.

If the fit is violent, and the habit of body full and ſanguine, bleeding will be of uſe; but care muſt be taken not to weaken the patient by drawing off large quantities, or repeating it too often.

In order to procure immediate relief, the body ſhould be opened with Glauber's ſalts, worked off with conſiderable draughts of thin gruel; but if the patient is particularly coſtive, which is generally the caſe, a purging clyſter with aſafœtida will be proper, which may be given in the following form.

> Take of milk and water in equal quantities, ten ounces—of Glauber's ſalts, one ounce—ſweet oil, and brown ſugar, of each one ounce and half—of aſafœtida, three drams.

This clyſter ſhould be adminiſtered modederately warm, and may be repeated as occaſion ſhall require; and perſpiration ſhould in all caſes be excited by drinking plentifully of diluting liquors, and carefully avoiding whatever may check an evacuation, the obſtruction of which is the moſt common cauſe of the diſorder, and on the reſtoration of which in many inſtances depends the cure.

In the *moiſt aſthma* the aid of expectorants is very important, and the following mixture is recommended.

> Take aſafœtida and gum ammoniac, of each one dram and half. Diſſolve in nine ounces of pure water, and let the patient take a large ſpoonful frequently.

To this mixture may be added, according to circumſtances, a ſmall quantity of the paregoric elixir, oxymel of ſquills, or ſyrup of garlic, which latter is celebrated as a ſpecific in aſthmatic caſes.

Whenever the oppreſſion of the breaſt is conſiderable, the patient may receive relief by frequently bathing his feet and legs in warm water, and even by fomenting the part affected, or applying bladders of any warm liquid: in emergent caſes, warm poultices to the ſoles of the feet may produce happy effects; rubbing the feet and legs to excite perſpiration may be alſo uſeful.

Vomits have been thought adviſeable, but not in the early ſtages of this diſeaſe; when the expectoration becomes tolerably free, they may in general be given with ſafety and advantage; for this purpoſe the oxymel of ſquills, or the emetic tartar, have been uſually preſcribed, though ſome are of opinion that ipecacuanha is to be preferred, and direct it to be taken in quantities from three to five grains every other morning, or leſs often, according to the ſtate of the diſorder, and to be continued for ſome weeks, as it may prove equally beneficial whether it excites vomiting or only a nauſea: if the humoural aſthma is attended with ſpaſms, ipecacuanha may be uſed in this way with great hope of ſucceſs.

Bliſters on the back, to be kept open, and other drains, ſuch as iſſues and ſetons, are frequently found to contribute to the patient's eaſe, and in particular when the aſthma is occaſioned by the repulſion of eruptions; in which caſe alſo ſuch medicines as promote perſpiration will be abſolutely neceſſary, and the following is adviſeable.

Take of the compound powder of contrayerva, ten grains—of nitre, four grains—of camphire, two grains. Make a powder, to be taken every ſixth or eighth hour.

Theſe powders may be waſhed down with a tea-cupful of the tea of elder flowers, to which a ſmall quantity of Clutton's Febrifuge Spirit may be added.

The following forms of medicines for this diſeaſe, may be uſed according to circumſtances.

A pectoral draught.

Take of the milk of gum ammoniac, one ounce and half—of ſpermaceti, diſſolved with yolk of egg, one ſcruple—of ſalt of hartſhorn, half a ſcruple—of nutmeg water, two drams—of balſamic ſyrup, one dram. Make a draught, to be repeated occaſionally.

A pectoral bolus.

Take of the root of elecampane powdered, one ſcruple—of compound powder of myrrh, ten grains—of nutmeg dried by the fire and powdered, ſix grains—of oil of mint, one drop—of balſamic ſyrup, enough to make a bolus. To be taken in the morning, waſhing it down with the following draught.

Take of water, one ounce and half—of nutmeg water, three drams—of ſalt of hartſhorn, one ſcruple—of balſamic ſyrup, one dram.

In the nervous aſthma, bleeding ſhould be admitted with caution; in caſes of this ſort opiates and the bark may be ſerviceable, and the following preſcriptions may be applied as occaſion may require.

Take of the fœtid volatile ſpirit, half an ounce—of the paregoric elixir, two drams. Mix, and take from twenty to forty drops occaſionally in any common diluting drink.

Take of the milk of gum ammoniac, one ounce and half—of ſalt of hartſhorn, half a ſcruple—of the paregoric elixir, twenty drops—of aſafœtida, one ſcruple. Make a draught, to be taken as it may be neceſſary.

In the dry or nervous aſthma, the warm bath, and the ſteams of warm water or of decoctions of the emollient herbs received into the lungs from the mouth, will aſſiſt the cure; and the bark, either in ſubſtance, decoction, or tincture, with ſmall quantities of opium, may be expected to compleat it.

The following medicines may be added to the preſcriptions already given, as they are ſaid to have been applied with great ſucceſs in this diſeaſe.

Take the pulp of freſh ſquills, and gum ammoniac, of each half a dram—of the flowers of gum Benjamin, one ſcruple—of balſam of ſulphur with aniſeeds, enough to make the whole into twenty-four pills; of which three may be taken morning and night, and the uſe of them continued according to circumſtances.

Take of tincture of madder, one ounce—of mace, two drams. Boil in a quart of water, and add to the decoction, when ſtrained, of the aromatic tincture, two drams—of ſyrup of lemon-juice, two ounces. Of this a tea-cupful may be taken three or four times a day.

In order to prevent returns of this diſeaſe, the patient ſhould be particularly attentive to warmth in his feet; and if he is at all advanced in years, can only hope to prolong his life by keeping ſome drain conſtantly open.

Simple remedies for the relief of this diſorder are numerous; among them the following are ſaid to have been ſucceſsful.

Eat boiled carrots as the principal food for a fortnight.

Make a ſyrup of the juice of garlic, and take a tea-ſpoonful when the difficulty of breathing is troubleſome.

Drink very ſtrong coffee, receiving the ſteam of every diſh into the lungs before it is ſwallowed.

Cut an ounce of liquorice root into ſlices, infuſe it twenty-four hours in a quart of water, and take a tea-cupful of the infuſion now and then, or uſe it as a common drink.

CHAP. VI.

Of Dropſies.

THERE are many kinds of *dropſies*, diſtinguiſhed by different appellations; but, as a general deſcription comprehending all the ſpecies, they may be denominated diſorders ariſing from ſwellings of the body, or of the particular parts affected, occaſioned by collections of water or thin humours.

Of theſe diſorders, the *anaſarca* is a collection of water immediately under the ſkin, ſpreading between the ſkin and the fleſh, and is ſeated in what is called the *cellular membrane*.

The *aſcites* is that ſpecies of dropſy wherein the water is accumulated in the cavity of the belly, or in the dilated cavities of the glands or other veſſels; and of theſe two kinds of dropſy we mean firſt to treat.

The cauſes of theſe diſeaſes are various; they are ſometimes the effect of other diſorders; as the jaundice or aſthma; inteſtinal obſtructions, ſuch as ſchirrous liver, conſumption of the lungs, or defects in the kidnies; they may alſo be occaſioned by exceſs of eating; immoderate drinking, particularly of ſpirituous liquors; by poor food and watery drink; and by whatever obſtructs or checks perſpiration, or occa-

ſions

ſions the blood to throw off an extraordinary quantity of fluids.

Dropſies may alſo be produced from an hereditary diſpoſition of the body, from want of exerciſe, from the ſuppreſſion or too great exceſs of evacuations, and from the effects of violent or too often repeated medicines.

The ſigns of the *anaſarca*, or *dropſy under the ſkin*, are, that the part is diſtended, and appears conſiderably larger than in it's natural ſtate; the colour of the ſkin is more pale, and the impreſſion of a finger remains ſome time after it has been laid on the part with any degree of weight or violence; the eye-lids after ſleep ſeem full and ſtiff, and the whole face enlarged, which appearances wear off after the patient has been ſome time awake; and his feet and ancles begin to ſwell towards night: if the diſorder is in the belly, it ſeizes the lower part, and gradually aſcends; and when it reaches the height of the navel, that part appears to ſink in; the urine and all the other evacuations are leſſened in quantity; the breathing becomes difficult; and the patient complains of heavineſs, wearineſs, and perpetual thirſt.

The ſymptoms of the *aſcites*, or *dropſy in the belly*, are in moſt caſes the foregoing, with the addition of ſeveral others: the inſides of the hands are hard and dry; the little urine diſcharged is diſturbed and high-coloured, and drops a great quantity of brick-coloured ſediment; a ſlow fever and troubleſome cough attend; the appetite fails; the arms and face are emaciated, and the legs ſwell; and, except the quantity of water hath rendered the integuments too tight, the water may be perceived to fluctuate, by gently ſtriking the belly on one ſide, and applying the other hand to the oppoſite.

In the worſt ſtate of this diſeaſe bliſters ariſe on the feet, containing an acrid corroſive humour, which inflames and ulcerates them; and this denotes an inflammation of the bowels, and conſequent death.

All ages, conſtitutions, and ſexes, are ſubject to theſe diſeaſes, though they more commonly attack ſuch as are advanced in years; thoſe who are debilitated by exceſſes, or worn down by other diſeaſes; and women after repeated child-bearings.

The diet ſhould conſiſt of dry and ſolid food, but not ſuch as is difficult to digeſt, or hardened with ſalt; the animal food ſhould be principally roaſted, and ſuch fleſh as is of a dark complexion, rather than white meats; beef and mutton are to be preferred to veal and pork; and ducks, geeſe, and wild fowl, to chickens, turkeys, or the like.

Of vegetables, creſſes of all kinds, the whole onion tribe, and horſe-radiſh, may be freely eaten; and warm pungent pickles, ſuch as the ſeeds of the naſtertium, radiſh pods, and ſuch other aromatics as are of Engliſh growth.

Preſerved fruit, and in particular raiſins, will be of ſingular uſe; the latter with biſcuits ſhould conſtitute the patient's ſupper.

Though ſome inſtances have occurred where patients, under the influence of ungovernable thirſt, have actually obtained cures by drinking, contrary to all advice, large quantities of beer, cyder, or other even ſmaller liquors, yet it has been held, that relief is rather to be expected by abſtinence as much as poſſible from fluids; that the thirſt may be allayed by acids of fruit, or by dipping bread in wine, but draughts of any liquid are in general prejudicial; and that where they are unavoidable, they ſhould be compoſed of a mixture in equal quantities of Spa water, and that ſort of Rheniſh wine, which on account of it's age is called old hock: of all liquors, ſound and generous white wines are to be recommended; though, according to the above opinions, the leſs in quantity taken of thoſe the better, unleſs medicated in ſuch a way as will be preſcribed hereafter.

In all chronic diſeaſes, and in none more than that of which we now treat, exerciſe is important; but it ſhould be uſed in ſuch a degree only, as to excite gentle perſpiration, not profuſe ſweats; and it ſhould be conſtant, and, as much as poſſible, in the open air, and upon the tops of hills and mountains: there is no diſorder in which a moiſt or humid air is more noxious; it therefore behoves the patient to reſide, during the cure, in an elevated ſituation, where he may breathe a dry, pure, and light air.

When the weather will not permit the patient to be abroad, he ſhould betake himſelf to ſome ſuch mechanic amuſement as may prevent his ſitting ſtill: ſtudious employments are very unfit for ſuch as are afflicted with theſe diſorders; thoſe who are of neceſſity engaged in them, ſhould make frequent uſe of the fleſh-bruſh, and dry flannels, over the whole body, but in particular about ſuch parts as are apparently affected.

To promote evacuations of all kinds muſt be our firſt attention; and for this purpoſe vomits, purges, perſpiratives, and diuretics, muſt ſucceed each other; but the ſtrength of theſe medicines, and the violence of operation, muſt be proportioned to age, ſtrength, conſtitution, and habit of body.

The vomits may be either of emetic tartar, from two grains to five, or of ipecacuanha, to the quantity of a ſcruple; but emetics ought always to be adminiſtered with caution; and if the patient ſhould be of a weak, relaxed, or reduced habit, they ſhould be either wholly omitted, or given leſs frequently, and of a leſs violent compoſition.

The following forms are alſo recommended.

Take of ipecacuanha in powder, one ſcruple—of the oxymel of ſquills, from half an ounce to an ounce—of ſimple cinnamon water, half an ounce. Make a draught.

Or, take of the yellow mercurial emetic, from three grains to five—of ipecacuanha root powdered, half a ſcruple—of ſimple ſyrup, enough to make a bolus.

The latter of theſe preſcriptions is calculated for perſons of robuſt habits and ſtrong conſtitutions, and will require to be worked off with rather a larger quantity of liquid than the milder emetics, after which two or three draughts of warm water or camomile tea will be ſufficient.

After the operation of the vomit, which muſt be repeated according to circumſtances, purges of the following compoſitions muſt be ſuited to the patient's age and ſtrength.

Take of ſyrup of buckthorn, one ounce—of jalap powdered, one ſcruple—of ginger powdered, half a ſcruple—of ſalt of tartar, half a ſcruple—of ſimple peppermint water, one dram. Make a draught, to be taken early in the morning.

Or, take of ſcammony powdered, one ſcruple—of gum guaiacum powdered, half a ſcruple. Mix for a purging powder, to be taken as above.

Or, take of jalap powdered, one ſcruple—of calomel, from five to eight grains—of the aromatic ſpecies, ſix grains—of ſimple ſyrup, enough to make a bolus. To be taken at going to reſt.

The laſt-mentioned bolus muſt not be repeated ſo often as to occaſion ſalivation, and a ſtrong decoction of garlic, taken to the amount of ſix or eight ounces, in different doſes of an ounce or two at a time, on the day ſucceeding the adminiſtration of the calomel, will conſiderably aſſiſt the operation of that medicine.

The following purges may alſo be given where the patient's habit of body will admit of an operation ſomewhat violent.

Take of elaterium, (which is a preparation from the wild cucumber) from half a grain to two grains—of oil of juniper, four drops—of ſugar, half a ſcruple—of ſimple ſyrup, enough to make a bolus.

Or, take of the powder of jalap, one ſcruple—of gamboge and ginger in powder, of each half a ſcruple—of ſimple ſyrup, two drams—of mint water, an ounce. Make a draught.

Or, take of jalap in powder, one ſcruple—cream of tartar, two drams—calomel, from four grains to ſeven—ſimple ſyrup, or ſyrup of roſes, enough to make a bolus.

Thoſe purges which have the calomel in their compoſition, ſhould not be worked off with any conſiderable quantities of gruel or other liquids; if they ſhould occaſion ſuch griping pains as to require being immediately moved, light broths of chicken or veal are proper for that purpoſe.

When the operation of either of theſe purges is over, ſome ſuch draught as the following will be neceſſary, as a neglect of it may probably occaſion the belly to be again diſtended.

Take of ſyrup of poppies, from half an ounce to one ounce—peppermint water, and Mindinerus's ſpirit, of each half an ounce—of the ſtomachic tincture, two drams—of ſalt of amber, ſix grains. Make a draught.

After the purges, ſuch medicines ſhould take place as tend to promote perſpiration, and of thoſe the following are adviſed.

Take of camphire, four grains—of liquid laudanum, one grain—of ſyrup of ſaffron, enough to make a bolus.

Among ſuch medicines as promote perſpiration, Dover's ſudorific powder hath been highly recommended; the following forms have been alſo preſcribed.

Take of caſtor powdered, fifteen grains—ſalt of amber, five grains—ſalt of hartſhorn, ſix grains—opium, one grain—ſimple ſyrup, enough to make a bolus. To be taken at bed-time.

Or, take of powder of ipecacuanha, fou
grains—of liquid laudanum, one grain—o
ſal ammoniac, one ſcruple—of ſyrup o
ſaffron, ſufficient to make a bolus. To b
taken alſo at going to reſt.

Camphire has alſo been adminiſtered i
theſe diſorders, as a ſudorific, with grea
ſucceſs; and it has been adviſed to rub th
ſkin with flannel cloths fumigated wit
camphire, and to give the camphorated ju
lep internally, in ſuch quantities as that
dram of camphire may be taken in th
twenty-four hours. Or, it may be give
in the following bolus.

Take of gum guaiacum, one ſcruple—
camphire, four grains—of opium, o
grain—of ſyrup of orange-peel, enough
make a bolus. To be taken at nigh
ſwallowing after it, at different times, tw
or three ſmall draughts of muſtard whey.

Diuretics will ſometimes remove the
diſorders, when the ſwelling is moderat
and, in weak conſtitutions, may ſucce
better than emetics and purges: theſe m
dicines are of various kinds, and are adm
niſtered in different forms.

Take of the ſimple bitter infuſion, one oun
and half—of the diuretic ſalt, half a dr
—of compound horſe-radiſh water, half
ounce—add, if neceſſary, three drams
Mindinerus's ſpirit, and make a draug
To be taken twice or thrice a day, acco
ing to circumſtances.

Or, take of ſalt of tartar, one dram—
vinegar of ſquills, one dram and hal
of peppermint water, ſix ounces—of
antimonial wine, two drams—of liq
laudanum, one dram—of ſyrup of oran
rind, half an ounce. Mix, and take
ounce as a doſe.

Or, take of the filings of iron, from
drams to half an ounce—of the root
ſquills powdered, one dram—of the
matic ſpecies, two drams—of the
ſerve of Roman wormwood, one ounc

of ſimple ſyrup, enough to make an electuary; of which the quantity of a nutmeg may be taken twice or thrice a day, and after it the following draught.

Take of the diuretic ſalt, from half a dram to one dram and half—of pure water, one ounce and half—of compound horſe-radiſh water, two drams.

Where the compound water of horſe- iſh cannot be procured, a double quan- of ſtrong decoction of that root may be ſtituted.

The following pills are celebrated in ſies; their operation is both purgative diuretic.

Take the extract of black hellebore, and myrrh diſſolved, of each half an ounce—of the dried leaves of the carduus benedictus, or bleſſed thiſtle, powdered, one dram and forty grains. Make a maſs, and let it ſtand in the air till it is ſufficiently dried to form pills, which may contain half a grain each. Theſe pills may be taken by eight or ten at a time, at the diſtance of an hour, till twenty, thirty, or forty, according to circumſtances, are got down; and are to be repeated in like quantities daily.

Various other remedies are preſcribed theſe diſeaſes; ſuch as decoctions of the eka rattle-ſnake root, infuſions of muſ- d ſeed, juniper berries, and horſe-radiſh, the quantity of an ounce of each, in a t of Rheniſh wine—a like infuſion of f the quantities of the ingredients, with addition of half a pound of the aſhes common broom. And the following dicated wine and ale.

Take of freſh horſe-radiſh root, muſtard ſeed unbruiſed, and tops of wormwood, of each one ounce—of white wine, three pints. Infuſe without heat ſeven or eight days, and ſtrain it off. Of this infuſion, from two to four ounces, according to the age of the patient, and other circumſtances, may be given two, three, or four times a day.

Take of the ſeeds of the wild carrot, one pound—root of elecampane, juniper berries bruiſed, and the ſeed of ſweet fennel, of each half a pound. Infuſe theſe ingredients ten days in ten gallons of ſtrong ale, and give half a pint twice or thrice a day.

The following infuſion is alſo ſtrongly recommended to promote the diſcharge of urine in theſe diſeaſes.

Take of zedoary root, half an ounce—dried ſquills, rhubarb, and juniper berries bruiſed, of each two drams—cinnamon powdered, ſix drams—ſalt of wormwood, three drams. Infuſe the whole ten days in three pints of old hock; at the end of that time ſtrain it off, and let the patient take two thirds of a pint of it in the twenty-four hours by ſmall quantities at a time.

The complaints attendant on theſe diſeaſes may, in many inſtances, be alleviated without retarding the great object of a general and effectual cure.

To relieve the torture of extreme thirſt, juices of fruits, reduced to the form of lozenges, or a bit of nitre, may be held in the mouth, and cruſts of bread dipped in brandy frequently chewed; nor are inſtances wanting, as we have before remarked, of cures actually performed by indulging the patient with ſuch liquors, and in ſuch quantities, as his inclination directed, and his thirſt demanded; and as the palate naturally ſuggeſts acids under ſuch circumſtances, perhaps if Rheniſh wine with water, cyder, or juniper ſpirit and water acidulated with vinegar, were in ſuch caſes to be uſed without reſtraint, the conſequences may be very different from thoſe which have been generally apprehended from the unlimited uſe of liquids in theſe diſeaſes.

Where the difficulty of breathing, which frequently attends dropſies, increaſes to ſuch a degree as to be highly oppreſſive, medicines ſhould be adminiſtered adapted to this complaint; we cannot however, in this caſe, recommend the loſs of blood, unleſs in very ſtrong conſtitutions, and in full and ſanguine habits; but relief ſhould, if poſſible, be obtained by gum ammoniac, and vinegar of ſquills; the former in quantities from five grains to eight, and the latter from two drams to three and a half, in a tea-cupful of the patient's common drink, or any other proper vehicle, to be repeated as often as occaſion may require. An infuſion of garlic may alſo be taken, in ſuch quantities as the patient's ſtomach will bear.

In caſe of a purging, all medicines which do not tend to remove it will be rendered uſeleſs during the continuance of this evacuation; to check which without violence, and to direct the offending matter to the urinary inſtead of the excrementary paſſages, uſe the following mixture.

> Take of ſalt of tartar, three drams and half—of white ſugar, half an ounce—of ſimple common mint water, ten ounces. Mix, and take two table ſpoonfuls three or four times a day.

When ſickneſs and vomiting occur, the former may be relieved by a ſmall quantity of the volatile aromatic ſpirit in peppermint water, and the latter by a gentle doſe of ipecacuanha.

Where the patient is troubled with gripings, the following bolus is recommended.

> Take of calomel, from four grains to ſix—of rhubarb powdered, twenty-five grains—of oil of mint, two drops—of ſalt of tartar, five grains—of ſimple ſyrup, enough to make a bolus. To be taken going to reſt.

In the *anaſarca*, when the legs and thighs are ſtiff and diſtended by the extravaſated humour, ſcarifications are recommended as the moſt ſpeedy means of delivering the patient from the burden of ſuch a quantity of water: but as ſome inconveniencies were formerly underſtood to attend this practice, from the difficulty of keeping theſe wounds open long enough to admit of ſuch a diſcharge as might be uſeful, from the danger which may ariſe from weakening the patient by ſo conſiderable an evacuation at once, and from the apprehenſion of a mortification from a defect of heat in the conſtitution; to remove theſe difficulties, it has been adviſed to perform this operation with the ſcarificator commonly uſed in cupping, placing the inſtruments ſo as to make the wounds tranſverſely, and ſetting the lancets ſo as to proportion the depth, and conſequently the width of the inciſions, to the thickneſs of the patient's ſkin; and in this way a quantity of water may drain from the legs and thighs, without the riſque of inflammation, and without reducing the patient ſo much as to deter him from a repetition of the operation if it ſhould be neceſſary. The inſtrument ſhould the firſt time be applied on each ſide the calf of one or both legs, as may ſeem neceſſary; nor will it be requiſite to apply glaſſes either before or after the ſcarification, but only to preſs the inſtrument upon the ſkin till a ſurface is formed ſufficiently flat for all the lancets to take equal effect: theſe openings are recommended in all caſes where the ſkin is ſo ſtretched as to threaten an inflammation, a burſting of the part, or a gangrene; and by making them tranſverſely, the fluid is diſcharged with more freedom, and the lips of the wound do not ſo quickly unite; but great care is required not to make the inciſions deeper than barely to penetrate the ſkin, and to prevent mortification by fomentations, containing proper mixtures of camphorated ſpirits of wine, ſpirit of ſal ammoniac, or the like, and by the application of proper digeſtives.

In the *aſcites*, letting off the water by tapping is generally adviſed when all other methods fail; but very ingenious phyſicians have been of opinion, that if this operation was performed in the early ſtages of the diſeaſe, and even as ſoon as water enough is collected to make it ſafe and practicable, it might be attended with the happieſt conſequences; but when it is left till the accumulated load has exhauſted the patient's ſtrength, and the vital heat is waſted by drawing off ſo large a quantity of the fluid too ſuddenly, ſwoonings, and even fatal effects, ſometimes follow.

After theſe evacuations, the patient will require ſtrengthening medicines; the bark in all forms, elixir of vitriol, warm aromatics, and now and then the compound tincture of rhubarb: the regimen of the recovering patient, both as to diet, air, and exerciſe, ſhould be conformable to the directions we have already given on that head.

When other preparations of medicine are not at hand, the following preſcriptions may be tried; they are all recommended as ſpecifics, and it is not improbable but ſome of them may be efficacious.

Take a table-ſpoonful of unbruiſed muſtard-ſeed night and morning, drinking after it half a pint of a decoction of the tops of green broom.

To make the decoction of broom-tops.

Boil two handfuls of the tender tops of this plant ten minutes, in three quarts of water. Let it ſtand till it is cold, ſtrain it off, and ſweeten with honey.

Rub the affected part with ſweet-oil for a very conſiderable time every day; the hand ſhould be warmed, and the patient placed near the fire: the longer the chafing the part is continued, the more hope may be had of ſucceſs.

Take the leaves of ſenna dried and powdered, cream of tartar, and jalap, of each half an ounce. Mix them well, and take a dram every morning in broth or milk whey.

Boil two handfuls of the roots of elder, for ten or fifteen minutes, in a quart of water; ſtrain it, and drink a wine-glaſsful of the decoction every day. The uſe of it ſhould be continued a month at leaſt.

Expreſs in a marble mortar a pint of the juice of pellitory of the wall, add a pound of coarſe ſugar, and boil it as long as any ſcum ariſes, taking it carefully off; when it is cold, bottle and ſtop it cloſe. The doſes are three table-ſpoonfuls at night, and two in the morning.

But there are alſo other dropſies, of which it will be neceſſary to ſpeak, beſides thoſe we have already mentioned, ſuch as the *hydrops pectoris*, or *dropſy in the breaſt*; and the *hydrops pulmonum*, or *dropſy of the lungs*; there are alſo dropſies of the ovaria, of the uterus, in the knee, and others; but as theſe require immediate medical and chirurgical interference, they are foreign to our preſent purpoſe. Of the *hydrocephalus*, or *dropſy in the head*, we have already treated among *the diſeaſes incident to children*.

The *hydrops pectoris*, or *dropſy of the breaſt*, is formed by the extravaſation of water in the cavity of that part of the body: the fluid is ſometimes contained in hydatids or bags, which may be ſituated on the external ſurface, or in the ſubſtance of the lungs; on the ſurface of the heart, or in the perecardium or membrane which covers it; and in other parts about the ſeat of the lungs; and when this is the caſe, it is alike difficult to obtain a knowledge of the diſeaſe, and to effect a cure.

The dropſy in the breaſt may ariſe from any of the cauſes which occaſion the other ſpecies; but it ſometimes happens from diſorders in the lungs, and frequently from a rupture of ſome lymphatic or abſorbent veſſel.

The ſymptoms are an oppreſſion of the breaſt, and great difficulty of breathing, which is leſs troubleſome when the patient lies down than when he ſits up, by which this diſorder may be diſtinguiſhed from an aſthma, in the more violent fits of which the patient cannot lie down. In the dropſy of the breaſt, not only the feet but the hands ſwell partially in a kind of tumor; the act of drawing in the breath is more eaſily performed than that of throwing it out; and when one ſide only is affected, or there is more water on one ſide than on the other, that ſide appears larger, and the face, arm and leg, on that ſide, are puffed up.

Perpetual bliſters on the legs, and the continued uſe of diuretics, are the principal remedies which have hitherto been offered for this diſeaſe; if theſe ſhould fail, and the water can be perceived to fluctuate, the laſt reſource is to draw it off by the introduction of proper inſtruments between the fourth and fifth of the falſe ribs: but for this operation a ſkilful and experienced ſurgeon is required.

The *hydrops pulmonum*, or *dropſy of the lungs*, is ſeated in the cellular membrane of theſe organs; ſometimes the approach of this diſeaſe is ſudden, in which caſe it is occaſioned moſt probably by the burſting of an hydatid or bag of water.

The ſymptoms of this diſeaſe are obſcure, and the following are not always to be depended on; yet they will in moſt caſes point it out, and eſpecially if the attack is ſudden.

The difficulty of breathing is at all times great, and increaſed by the ſmalleſt motion, yet it is not particularly affected by different poſitions of the body, ſo that it is equally ſevere whether the patient ſits up or lies down; he complains of a conſtant anxiety and oppreſſion of the breaſt, and when he attempts to draw his breath deep or ſtrong, it ſeems to be ſuddenly ſtopped, and he finds himſelf unable to dilate his cheſt for the purpoſe; the pulſe is ſmall, low, and oppreſſed; the countenance puffed up and pale; the legs are commonly ſwelled; and the whole habit appears looſe and watery.

The regimen in this diſeaſe is required to be in all reſpects the ſame as that which we have recommended in dropſies of the belly; in this caſe the patient ſhould be abundantly careful not to take cold, for if an inflammation of the lungs ſhould be complicated with this diſeaſe, fatal conſequences will moſt probably enſue.

On the firſt appearance of this diſeaſe, briſk purges ſhould be immediately adminiſtered; thoſe with calomel are moſt ſuitable; after this the Seneka root ſhould be given liberally; no medicine can be ſo likely to afford relief, for it acts powerfully by urine, and perſpiration, and conſiderably promotes expectoration; the powder is to be preferred to any other preparation, and may be given in doſes, from one ſcruple to a dram, once or twice a day, in any common drink; but if this ſhould not agree, a decoction may be made as follows.

> Take of the root of Seneka rattle-ſnake cut in pieces or ſliced, three ounces—of water, ſomewhat more than a pint. Boil till it is reduced to the laſt mentioned quantity, then ſtrain off, and give two, three, or four table ſpoonfuls, three or four times a day, according to circumſtances.

Beſides theſe medicines, ſuch diuretics and perſpiratives as have been preſcribed in the former part of this chapter ſhould be tried: in a diſorder, of which the cure is doubtful, all attempts ſhould be made, and ſometimes one remedy ſucceeds when many others have been uſed in vain.

When all the efforts of medicine fail, and the caſe becomes deſperate, an inciſion may be tried, and a puncture made into the lungs to diſcharge the water: but this operation is alſo the buſineſs of an able ſurgeon.

CHAP.

CHAP. VII.

Of the Gout.

IN treating of a diſeaſe on which ſo great a variety of opinions hath been delivered, and on which ſo many learned, ingenious, and ſpeculative diſſertations have been publiſhed, it may appear preſumptuous to entertain a judgment of our own, or to offer arguments to prove, that though many, if not moſt of the numerous writers on this ſubject, have been undeniably right in ſome points, they have unqueſtionably erred in others; and that whilſt ſome have held regimen in contempt, and pinned their faith on works of art and medical interpoſition, and others have carried their ideas of diet beyond the bounds of common reaſon, and have taught us to avoid this diſeaſe, at the expence of a very conſiderable part of thoſe comforts which the great Author of Nature has pointed out to us by the natural cravings and deſires of our appetites after them; both ſides have been equally wide of the mark: and that, on a fair ſtate of the caſe, moderation is the great rule of preſervation againſt the pains and dangers of this and other chronic diſeaſes; and that a regimen founded on this rule, will ſerve to prevent theſe diſorders, which, however, medicine may in ſome caſes help to relieve.

Such an opinion we have however formed, as well from the writings of others, as from our own experience; and under a conviction, that a practice grounded on this opinion will contribute to leſſen the horrors of this univerſal yet dreaded diſeaſe, and prevent the unfortunate victim of it's more violent attacks, from being oppreſſed in youth with the infirmities of old age, and whilſt his mental faculties are in full vigour, feeling a decay of all his corporeal powers, aggravated by the keen ſenſations of pain, anguiſh, and deſpair; we ſhall firſt deſcribe the diſorder with it's ſymptoms, afterwards ſpeak of the cauſes, and then offer ſuch ſyſtems of regimen and medicine, as ſeem beſt calculated to effect purpoſes in which the happineſs of a large portion of mankind is deeply intereſted.

The *gout* is a chronical diſorder, and the pain which attends it principally ſpaſmodic; when it affects only the extremities, declines and goes off gradually, and returns at certain periods, it is called a regular fit: and when it affects the internal parts, or flies from the extremities to thoſe parts, when it's returns are uncertain, and when it goes off and comes again with violence in a ſhort ſpace, and before the patient has recovered ſtrength, it is ſaid to be an irregular fit.

Many experiments have been made in order to diſcover whether the gouty matter is of an alkaline or acid quality; the reſult of which ſeems to be, that it may be either, or rather, that it is ſometimes one, and ſometimes the other, and that if no chalkſtones or knots are produced, or they come on but very ſlowly, and the limbs affected ſwell partially and conſiderably, the diſorder is occaſioned by an alkaline humour; but if theſe ſymptoms appear ſuddenly, or increaſe rapidly, it is cauſed by acids; or, as this queſtion has been defined by a very ingenious, though we confeſs ſomewhat ſpeculative writer, when the *cauſe* is a predominant *alkali*, the *effect* is a *relaxed*, *moiſt*, and *putrid habit*, and when the predominancy of the *acid* occaſions the diſeaſe, the *effect* is a dry, *tenſe*, or *inflammatory* diſpoſition of body.

With reſpect to the formation of chalkſtones, different opinions have been held, and thoſe equally curious and unſatisfactory; ſome conceiving that theſe are ſtrong concretions formed by earthy particles in the human aliment, and others apprehending that they are created from a redundancy of bony matter, ſeparated by ſmall arteries, and thrown upon the membranes, or cartilages.

The firſt attack of the gout is commonly ſudden, and happens generally in the winter, or in the early months of the year: the regular fit is uſually preceded by indigeſtion, wind in the ſtomach, drowſineſs, pain in the head, heartburn, ſickneſs, and ſometimes a diſpoſition to vomit; wearineſs, and loſs of ſpirits, though the appetite is ſometimes particularly keen a very ſhort time before the approach of the fit; the patient complains of a ſenſation like wind, or cold water paſſing down the thigh, and the diſcharge of urine is attended with a ſlight pain. The fit generally ſeizes the patient about the middle of the night, or very early in the morning, and moſt commonly in the great-toe, though in ſome inſtances it fixes firſt in the foot, ancle, or calf of the leg: the pain is accompanied with a ſenſe of pouring cold water on the part, and is ſoon followed by a ſhivering and degree of fever, more or leſs conſiderable according to the violence of the fit; after this the pain increaſes, and extends to the ſmall bones of the foot, where it rages for about twenty-four hours, during which time the patient endures variety of tortures, the part by turns ſeeming to be burnt, ſtretched, extended with extreme violence, and gnawed by voracious animals: towards the morning, after the night which ſucceeds the attack, the patient's ſtrength ſeems exhauſted, and without perceiving that he is more at eaſe, he falls into a ſleep, which appears to be produced by mere fatigue, but during this interval a perſpiration comes on which carries off the paroxiſm; but a fit of the gout conſiſts of ſeveral ſuch, ſometimes in the ſame and ſometimes in other parts, the number, frequency, and duration of which depend on the quantity of gouty matter, the age and ſtrength of the patient, the ſeaſon, and other circumſtances; but theſe ſeizures become leſs and leſs troubleſome as the diſorder declines, till the pain is only ſlightly felt towards night, and goes entirely off before the morning; whether the fit be of longer or ſhorter continuance, a proportionable degree of tenderneſs will remain, and even if the pain ceaſes after the firſt paroxyſm, this inconvenience will be left behind; nor is it an uncommon caſe for a ſhort fit of the gout, which does not laſt above two or three weeks, to occaſion ſuch weakneſs and ſoreneſs, as to render the patient unable to walk for as many months.

This attack is in moſt caſes repeated the following year, about the ſame time, and that with increaſed ſeverity; ſometimes it does not return till the ſecond year, but each ſucceeding fit grows worſe than the former, till in ſome inſtances the continuance of it is for ſeveral months, and the paroxyſms or relapſes ſo frequent, that the intervals of eaſe do not allow the patient to recruit his ſtrength, and he becomes a perfect cripple.

But to this ſtate the approaches are more or leſs rapid according to circumſtances; one man will have regular ſhort fits for a number of years, during which the ſymptoms will not appear to be much aggravated, nor the patient's conſtitution to have ſuffered any material injury; whilſt two or three returns of the diſorder will not only deprive another of the uſe of his limbs in the intermiſſions, but make ſuch ravages in his whole frame, as to place him beyond every hope of the future enjoyment of health or comfort.

Nor are theſe the only conſequences which may be dreaded from this diſeaſe; it ſometimes degenerates into a dropſy, or terminates in an aſthma, in either of which caſes, the debilitated habit of body renders death unavoidable.

So many various cauſes have been aſſigned for this diſtemper, that it would be almoſt as impracticable to enumerate them, as to trace the different remedies which have been preſcribed for the cure of it: we are not inclined to place any very great degree of confidence in the accounts which have been given either of the one or the other; many of the cauſes to which it has been attributed we apprehend to be chimerical, nor are we better ſatisfied with the hiſtories of cures, which are ſaid to have been performed by ſpecific medicines, the numbers and variety of which would furniſh no deſpicable catalogue.

It has been aſcribed to ſitting up late, cloſe application to ſtudy, and intenſe exerciſe of the mind; to grief, vexation, and anxiety; to paſſion and diſcontent; and to thoſe cauſes which are made to account for moſt of the indiſpoſitions of the human body, colds, obſtructions, and checked or impeded evacuations.

But almoſt all theſe cauſes, as well as others much more probable, have with many ſpeculative perſons given way to an idea, that this diſeaſe is hereditary, and tranſmitted from father to ſon as a patrimonial right of inheritance; a fatal error, calculated to miſlead men from the only path in which they can hope to travel the journey of life, without being interrupted by this powerful enemy to eaſe, comfort, and happineſs.

Nothing can be more true than that the gout may be increaſed, that is to ſay, the fits may be prolonged and the pains heightened, by moſt of thoſe means which we have juſt mentioned: the want of exerciſe, which neceſſarily attends ſedentary employments, will diſpoſe the body for every diſorder, and for this in particular; paſſions and anxiety create a degree of fever which cannot fail to aſſiſt the operations of diſeaſe: and colds and obſtructions may prevent much of that morbid matter which conſtitutes the gout from paſſing off by perſpiration; and counteracting the efforts of nature, may render the fits more frequent and more acute.

Nor is it leſs certain that this diſorder is often to be met with in families, deſcending in a direct line from father to ſon, as a ſeeming appendage to that eſtate from which, as well as this accompaniment of it, the daughters are almoſt univerſally excluded; and we are ready to allow, that the family ſettlements contribute conſiderably to the perpetuating this diſorder, though we can by no means admit, that of neceſſity it follows the blood any more than the inheritance of the anceſtor.

The gout is a tax juſtly impoſed on *lazineſs*, *luxury*, and *diſcontent*; it is a tribute which we yield for the indulgence of our appetites, and the gratification of our deſires and paſſions: by our own faults and follies we bring it by ſlow and imperceptible degrees on ourſelves; and we muſt be content to pay the forfeit of our imprudence, or tread back the ſteps we have taken, for which no ſmall ſtock of patience and perſeverance is neceſſary, ſince it hath ever been acknowledged that a retrograde motion is much more tedious, tireſome, and difficult, than a progreſſive.

But poſitions ſo contradictory to our wiſhes and inclinations are not eaſily admiſſible: if we attribute the gout to ſudden and accidental cauſes, we expect to find certain and ſpeedy remedies for it, and apply to the phyſician for a cure of the diſeaſe, for which, as the cauſe is known, he is ſuppoſed to be furniſhed with a variety of preſcriptions; and when we can load our parents with the heavy charge of entailing on us the curſe of gouty habits, we rid ourſelves of the diſagreeable taſk of ſubmitting to rules and regimen to conquer a diſeaſe which we chuſe to conſider as hereditary, and therefore incurable; and voluntarily conſent to languiſh in pain and miſery, deriving conſolation from the reflection, that we have not brought it on ourſelves, and that all attempts to remove it are vain, and refuſing to liſten to the arguments of reaſon and truth, leſt they ſhould overthrow an hypotheſis, which, however contrary to our real intereſts, we feel ourſelves *inclined* to ſupport.

Thoſe who labour under the former infatuation, will do well to look round them, and try if they can diſcover a ſingle inſtance of a radical and compleat cure of this diſeaſe effected by medicines adminiſtered under the preſcriptions of the moſt ſkilful phyſician, or the noſtrums of the moſt popular and apparently ſucceſsful quack: but in making this inquiſition, he muſt be careful not to confound intermiſſions for cures, nor to conſider in this light the abſence of pains and inflammations in the limbs; when in exchange for thoſe complaints, the patient's conſtitution is ruined, and inſtead of one diſeaſe, he feels himſelf oppreſſed by a number.

To thoſe who claim the gout by deſcent, we recommend an enquiry into the variety of caſes where this diſorder hath been totally and effectually cured, (though not by medicine) and no other arguments will be neceſſary to invalidate their pretences to it; becauſe it is obvious to the plaineſt underſtandings, that the diſeaſe which admits of being totally eradicated, cannot be ſuch a one as may be communicated from generation to generation.

But if the advocates for hereditary gout ſhould ſtill require better proofs of the improbability of this doctrine, before they can bring themſelves to renounce a favourite opinion, let them aſk if the gout is to be found in families after they have been diveſted of thoſe fortunes, from which, rather than from the courſe of blood, this diſorder has been derived; and, as luxury and extravagance generally go hand in hand, it will be no difficult matter to diſcover the deſcendants of men, who have wallowed in wealth and diſeaſe, reduced by the improvidence of their anceſtors to earn by bodily or manual labour the means of ſubſiſtence; is the gout more frequently to be met with among ſuch than among others of the claſs to which they are fallen, and is the curſe of diſtemper entailed on them, and the means of alleviating their miſeries denied, merely for the ſins of their forefathers, and without any guilt of their own? The ſuppoſition would arraign the juſtice of Heaven, and facts contradict the exiſtence of the evil; the exceſs and indulgence which are the uſual conſequences of wealth, create and nouriſh the diſorder; poverty, which is the parent of labour, brings, as a compenſation for the gifts of fortune, Health, the choiceſt of bleſſings.

Let it then be admitted, that the gout is neither accidental nor hereditary; that it is neither unavoidable from any combination of natural circumſtances, nor of neceſſity impoſed on us at our entrance into the world; and it will follow of courſe, that it muſt be occaſioned by one or more, moſt probably all the cauſes we have already aſſigned; and that indulgence and exceſſes, either corporeal or mental, produce this formidable diſeaſe.

But before we proceed to conſider in what proportions, *lazineſs*, *luxury*, and *diſcontent*, contribute to the creation and maintenance of this diſorder, it may be proper to obſerve, that when we attribute the gout in general to one or more of theſe, as the immediate cauſes, yet we do not undertake to aſſert that this poſition admits of no exceptions; ſome few inſtances may be found wherein fevers, and even other chronic diſeaſes, have either degenerated to or terminated in the gout: but it is not unlikely, that, by an inveſtigation of the former caſe, the origin may be traced to the ſame ſources, and the fever or other diſorder be found to owe it's exiſtence to the imprudences which we have pointed out as the primary cauſes of the gout.

Nor are we to conclude, becauſe in a variety of inſtances we ſee the idle, the pampered,

pered, and the diſſatisfied man, paſs through life without being attacked by this diſeaſe, that we may follow his example with impunity; and that exceſſes which do not affect one man, cannot poſſibly injure another; as well may we court the perils of tempeſts, fire, and the ſword, and contend that no precautions are neceſſary againſt the unfavourable elements, becauſe ſome have eſcaped their fury unhurt; or ruſh into battle without apprehenſion, becauſe the ſame fate does not await every individual: from whatever quarter well-founded fears of danger threaten, prudence directs us to avert the ſtorm; and he who confides his ſafety to the chance of it's paſſing by, will too often, and not undeſervedly, be overwhelmed by it's burſting over his head.

But, beſides ſuch as favour the opinion of hereditary right to this diſeaſe, and thoſe who contend that it ariſes from accidental cauſes, there are others who take it in their heads to ſuppoſe, that there is ſome diſtinct ingredient in different conſtitutions, predispoſing each to ſome peculiar diſeaſe, and ſo account for one man's being gouty, a ſecond aſthmatic, and a third dropſical; and that under this pre-diſpoſition of body, it is impoſſible for any one to paſs through life, without being attacked by the particular diſorder allotted him in the original compoſition of his frame; and fantaſtical as this idea appears to perſons of ſenſe or conſideration, it prevails ſo ſtrongly in the minds of ſome men, that they actually forego the means of preſerving and reſtoring health, from a conviction that it is impoſſible to avoid diſeaſes to which they are by conſtitution devoted.

It is almoſt unneceſſary to aſſert, that ſuch prejudices are without any foundation in nature; that the difference of conſtitutions depends only on ſome being more ſtrong or more weak than others, and that even this difference ariſes much more from acquired than natural habit: miſmanagement will render the ſtrong weak and ſickly, and prudence will get the better of the tendereſt habit, and expelling diſeaſe, introduce health and ſtrength in it's ſtead.

Nor do an athletic make and a robuſt appearance always denote a vigorous conſtitution: many, whoſe frames ſeem calculated to defy the approaches of diſtemper, are valetudinarians through life, and others of the moſt delicate and puny figure enjoy perfect and uninterrupted health; even thoſe which are called the diſeaſes of old age, are not the neceſſary attendants on that ſtage of life, for many have lived long beyond the common computation of mortal exiſtence, without feeling the inconveniences of illneſs, or the pains of any one malady.

Hence it is apparent, that this diſeaſe does not ſpring from any natural defects in our conſtitutions, any more than that it is produced by accident, or derived from deſcent, but muſt be aſcribed to one or more of thoſe cauſes of which we now proceed to ſpeak.

Whoever carefully examines, and attentively conſiders the human fabrick, will be at no loſs to diſcover, that in the original formation of it, Providence ordained that every man ſhould ſeek his own ſubſiſtence by labour, and that this diſpenſation was wiſely and graciouſly calculated to give the reliſh of health to the bleſſings which awaited the efforts of induſtry, and a zeſt to the enjoyment of thoſe pleaſures which naturally reſulted from a combination of health and plenty.

And in the earlier ages of the world, when the inhabitants of the earth were ſcattered ſo thinly over the face of it, that the property of the ſoil was held in little eſtimation, and when the wants of mankind were confined to neceſſary food and cloathing; both which were the acquiſitions of mere labour, for which each man was alike qualified, and in the procuring which every individual was equally intereſted; the life of man was interrupted by few diſeaſes, he arrived at extreme old age without the aid of the phyſician, and, excepting the accidental interpoſition of external injuries, felt the firſt tokens of indiſpoſition in a gradual decay, and received the firſt intimation of approaching death from the infirmities of a body bending only under the weight of years.

But as the world grew more populous, a neceſſity aroſe that property ſhould be aſcertained; ſocieties were formed for the protection of it, and as order could not be maintained in thoſe ſocieties without a certain degree of ſubordination, rank, precedence, and the power of governing, was naturally yielded to thoſe who poſſeſſed the moſt enlightened underſtandings, or the moſt enterprizing ſpirits: an extraordinary acceſſion of authority produced reſpect and deference; and preſents, the tokens of that reſpect, placed ſome individuals in a comparative ſtate of wealth; to theſe, perſonal labour became unneceſſary, and the pleaſures of ſociety drew off their attentions from the neceſſity of ſubſtituting exerciſe in it's ſtead; and thus originated *indolence* and *inactivity*, which by a variety of gradations in a natural chain of events, have now extended their influence over a very large portion of mankind.

Thoſe who have conſidered a deſtination to labour as an evil, ſeem either to have forgotten, or not to have underſtood, the relation between activity of body and health: labour ſufficient to procure the means of ſubſiſtence, is the degree of exerciſe which the body was originally deſigned to take, and which is abſolutely neceſſary for the preſervation of health, and was therefore ordained for the good of man; and he who, inſtead of this ſalutary proviſion of Providence, indulges in a life of lazineſs and indolence, undermines the foundation of his happineſs, the health and vigour of his body, and eſtabliſhes a laſting fund of ſickneſs, diſeaſe, and wretchedneſs.

And this will be more eaſily underſtood, if we conſider that health and ſtrength, and of conſequence ſpirits, depend upon parts of the body ſo very minute as to be almoſt inviſible; upon thoſe very ſmall tubes or pipes which are continuations of the larger blood-veſſels, through which the fineſt parts of the blood muſt conſtantly find a paſſage, and by being forced through which the globules are broken and divided, and prepared for a ſtill ſmaller ſet of veſſels, through which it again undergoes the ſame operation, and ſo on, through ſtill leſs and leſs, till they become too minute for the ſight, even with the aſſiſtance of the microſcope.

To keep up an equal and continual motion of the blood through theſe innumerable ſmall veſſels, requires the aſſiſtance and combined force of all the muſcles of the body to act at different times upon the veins, and to haſten the circulation of the whole maſs of blood, the ſtrength of the heart and arteries alone being inſufficient for this purpoſe: this aid can only be obtained by exerciſe or labour, in which the muſcles are principally employed; and it is for want of exerciſe that the paſſage of the fluids through the more minute channels is ſtopped, and the veſſels themſelves dried up, by which means the indolent either become pale and emaciated, or are overburdened with a ſickly and unwholeſome fat, according to different habits of body; but in both caſes are languid, faint, and oppreſſed by the leaſt motion, the blood being either impelled through the larger and unobſtructed veins in quantities too great to be contained without producing that kind of ſuffocation which occaſions the foregoing ſymptoms; or the ſmaller veſſels being by the ſudden and unuſual operation of the muſcles violently expanded, the blood ruſhes through them towards the ſurface of the ſkin, and occaſions a glow or fluſh, which very obſervably attends the exertions of thoſe who lead ſedentary lives.

Indolence or inactivity having thus formed obſtructions in thoſe exquiſitely fine parts, the health of body and vigour of mind are of conſequence impaired; a ground-work is laid for future diſeaſes, which take place according to circumſtances, by means of colds, exceſſes, or even the increaſed powers of thoſe very obſtructions, and which the active and laborious never feel.

Nor are theſe obſtructions the only evils produced by inactivity or indolence; want of digeſtion, and loſs of appetite, are the natural conſequences of ſuch habits. The ſprightlineſs and alacrity which accompany an active life, that hearty appetite which needs no reliſh of ſauces, and that light and pleaſant digeſtion which follows the meal for which the ſtomach is prepared by exerciſe and labour, ariſes from a conſtant ſupply of new blood prepared from the food, and diſtributed daily through all parts of the body; and he who lives beyond a day with the ſame blood, will feel an alteration in his health and ſpirits: but the joint action of every part of the human body is neceſſary, as well for the preparation and diſtribution of the new blood, as to make room for it by throwing off the old, which muſt alſo be regularly performed, or the veſſels will be over full, and diſeaſes ariſe from that cauſe. But in a ſtate of indolence neither of theſe proceſſes will be regular; that inſenſible perſpiration which ſhould carry off the old blood, prepared for the purpoſe, is inſufficient to anſwer that end, nor will there be any vacancy in the veſſels to receive new blood, ſhould it be formed; hence the appetite, the deſires of which were originally inſtituted to furniſh ſupplies, will diminiſh, or if it is ſtimulated, indigeſtion will follow; and the temporary, uncertain, and in moſt caſes inefficient aid of medicine and art, will be required by drugs and phyſical preparations to procure a falſe digeſtion, and by artificial drains and evacuations to carry off the ſuperfluous juices; and how far theſe will aſſiſt, may be judged by reflecting, that in perſpiration thoſe juices only are thrown off which the powers of Nature have prepared and ſeparated as uſeleſs or noxious; but bleeding, iſſues, ſetons, and bliſters, draw away a mixture of all the fluids, and not only eaſe the body of ſuch as are injurious, but deprive it of thoſe which are neceſſary to it's health and well doing: and thus men ſeek the violent efforts of art, which are always precarious, and generally unavailing, in preference to the ſimple, eaſy, and certain, action of nature; and, perſiſting in habits of *lazineſs* till they become unconquerable, lay the general foundation of diſeaſe, the nature of which will be governed by the conſtitution or accidental circumſtances. Thoſe who are originally robuſt and vigorous will perhaps eſcape with being crippled with the gout, or racked with rheumatiſm; and thoſe who are able to reſiſt the conſequences of their own folly muſt in all probability ſubmit to a more ſpeedy fate in palſy, jaundice, colic, or gravel and ſtone; or to all the miſerable train of hyſterical and hypochondriacal complaints.

The appetite, blunted and ſpoiled by lazineſs, *Luxury*, like a falſe friend, offers it's aſſiſtance, and we conceive the flattering hope of reſtoring it by high ſauces and rich wines; the tempting ſenſualities of the table and the bottle procure a reſpite from the languor of body and depreſſion of ſpirits which accompany approaching diſeaſe, but the relief is merely temporary, and a continued repetition of the ſame courſe is abſolutely neceſſary; each day adding to the exceſs, as the difficulties of ſuſpending the pain and anxiety increaſe, till Nature, worn out with perpetual importunities, refuſes to perform her offices, and the diſeaſe, whatever it be, becomes perfect maſter of a conſtitution filled and prepared for it's reception and entertainment by the united endeavours of indolence and intemperance.

Nor is the luxury and intemperance of which we now ſpeak confined to what are commonly eſteemed exceſſes in food or liquors; whoever eats or drinks more than he can eaſily and readily digeſt, or feeds on ſuch diet as diſagrees with his conſtitution, commits exceſs; and whether diſeaſes are begot by the gluttony of turtle feaſts and hogſheads of claret, or by two plentiful meals a day of beef or mutton, and copious potations of humble Port, they will alike be derived from intemperance, and produced by our own faults and follies.

The temperance neceſſary to health, and by a conformity to which men may hope to paſs through life without being viſited by gout and other chronic diſeaſes, has been deſcribed as many different ways as there have been different writers on the ſubject: one recommends a milk diet, and a total abſtinence from animal food; another aſſerts that vegetables and bread are the only proper materials for our aliment; a third forbids wine as the ſole cauſe of theſe diſorders, and with wonderful ingenuity weighs the aggravated evil of every glaſs that is ſwallowed in a ſcale of his own invention, and ſupports his ideas with ſome appearance of reaſon, and with great plauſibility of argument; and a fourth admits of animal food and an occaſional debauch with the bottle, but warns you againſt the dangers of eating a pickled cucumber with your leg of mutton, or horſe-radiſh with your beef-ſteak, and conſidering bread as the moſt prejudical part of your food, and ſalt, vinegar, and pepper, as equally injurious, leaves you to a banquet of fleſh alone, without even common ſeaſonings to diſtinguiſh your diſhes from the reeking delicacies of the Tartar, or the dainties which grace the table of the native American.

With great deference to the reſpective judgments of theſe irreconcileable purveyors for the human appetite, we beg leave to differ materially from the opinion of each, though the ſyſtem of temperance we mean to adopt will in ſome reſpects derive aſſiſtance from every one of thoſe plans, from which we conceive it will be no difficult matter to eſtabliſh regulations for the preſervation of health, without depriving mankind of the comforts of life or the pleaſures of ſociety; without denying them thoſe kinds of food which Providence ſeems to have allotted for their ſupport; and without depriving their tables of the pleaſure of variety, or the reliſh of plain cookery and unhurtful ſauces.

And this we apprehend may be effected by conſulting our conſtitutions and habits of body; by obſerving what quantity and what kind of food ſits light and eaſy on our ſtomachs, and digeſts ſpeedily without leaving a load, ſickneſs, ſourneſs, or uneaſineſs; by a determination never to eat a morſel after the calls of nature are ſatisfied, or to whet the appetite by great variety at the ſame meal, or by rich, poignant, or highly ſeaſoned diſhes: to attend with the like care to the operation and effect of liquors; to avoid whatever is foul or unconcocted, whatever heats the body or occaſions acidities in the ſtomach, and to accuſtom ourſelves to ſmall quantities of even common drinks, and leſs of wine or other ſtrong liquors.

Nor are theſe the only rules which *moderation* requires us to obſerve; our deſires are ſometimes miſtaken for the calls of nature, and therefore muſt at all times be diſtinguiſhed from them; we are ſometimes prompted by inclination to eat a hearty fleſh ſupper, after having made a plentiful dinner of animal food; yet far from requiring ſuch an indulgence, the weight and indigeſtion which follows, proves evidently that Nature is offended at the unreaſonable impoſition; our deſires ſometimes induce us to drink larger draughts than uſual, but Nature ſhews her diſapprobation by head-aches, nauſea, and in ſome caſes actual rejection:

jection: if we take Nature for our guide, and follow her directions with little variation, we ſhall ſeldom wander from the paths which lead to health, or bring on diſorders by any ſpecies of exceſs or intemperance.

Under theſe rules we may venture to aſſert, that the moderate enjoyments of the table, and even the bottle, are by no means incompatible with an earneſt deſire to taſte the bleſſings of health in their fulleſt extent, or to prolong the exiſtence of life and the vigour of conſtitution to enviable old age; for we are of opinion that a great deal of miſchief may be done by abſtinence from neceſſary ſuſtenance, and over ſtrict regimen, in this particular, though perhaps not altogether ſo much as by gluttony and inebriety.

The *moderation* which we recommend, will conſtitute a courſe of life equally conſiſtent with health and pleaſure: let men eat till nature is fully ſatisfied, but not till ſhe is ſated; let the food be generally plain roaſt and boiled meats, with little other ſauce than it's own gravy; let it be rather under-dreſſed than dry; and let it always be accompanied with a conſiderable portion of vegetables, and a reaſonable quantity of good and well-baked bread; let the ſupper conſiſt of light things, rather of fruits, biſcuits, or vegetables, than of animal fleſh; to thoſe who have accuſtomed themſelves to ſuppers, ſhell-fiſh of all kinds will be found equally agreeable and innocent; milk chocolate, milk broth, or gruel, will be a wholeſome and nouriſhing breakfaſt; but we do not diſapprove of tea, provided it be taken with cream and ſugar, and not ſwallowed ſcalding hot.

Spices and ſeaſoning ſhould be very ſparingly uſed; the habitual uſe of pepper, vinegar, muſtard, and other ſtimulatives, blunts the palate ſo much, as in time to render large quantities of theſe incentives neceſſary to produce any effect at all, and by this means theſe articles contribute largely to the production of diſeaſe; though, taken occaſionally, they may not only be innocent, but actually ſalutary.

For drinks at meals, a draught or two of good ſound, and fine table-beer, or of cyder of the ſame deſcription, may be admitted without danger; thoſe who require repeated draughts, will do well to take now and then a glaſs of water, inſtead of large quantities of ſtronger liquors; and we would adviſe the laſt liquid ſwallowed at table to be a moderate quantity of this light and digeſtive element.

To thoſe who are in the habit of drinking after their meals, ſome cautions will be neceſſary; they muſt be warned not to paſs the bounds of moderation, which they do whenever they exceed the quantity of two or three glaſſes of good wine, or a like proportion of mild ale or ſound porter; but they who have reſolution enough to break through this cuſtom wholly, and content themſelves with quenching their thirſt, will feel the advantage of this ſelf-denial in a better digeſtion, and in the uſe of theſe liquors as cordials in ſickneſs, languor, weakneſs, or the preſſure of unfortunate events.

Spirituous liquors and punch are by no means to be admitted, except in particular caſes ſmall quantities of the former by way of medicine: the pernicious cuſtom of quaffing large bowls of the latter boiling hot, is little better than taking liquid fire into the ſtomach; though the operation of this mixture may not be quite ſo ſudden, it never fails to conſume by degrees the ſtouteſt and moſt vigorous conſtitution.

We have omitted, as unneceſſary, obſervations with which every medical book is replete, and which are not only to be found in the mouths and writings of phyſicians, but in the volume of common reaſon and ſenſe—that meats hardened with ſalt and ſmoke reſiſt the powers of digeſtion, and are therefore unwholeſome and pernicious—that all animal food tending to putrefaction, the acid of vegetables is neceſſary to prevent that tendency from going too far—

that animal fleſh, which has undergone the operations of refined cookery in ſtews, ragouts, and fricaſſees, in pickling, potting, and preſerving, has loſt it's light and nutritive juices, and imbibed the heterogeneous and pernicious qualities of the pungent, acrid, ſour, and heating ingredients, with which it is mingled and ſophiſticated—that whatever food or liquid has a tendency to acidity, is deſtructive to health, becauſe the original cauſe of all chronic diſeaſes is an acid crudity prevailing in the juices—and that ſweet-meats of every kind, and whatever is fermented, either in the form of liquids or ſolids, are of an aceſcent nature, and produce, by fermentation in the ſtomach, wind, vapour, fumes, and that univerſal ſymptom of diſeaſes occaſioned by imprudence in the article of diet, which is commonly called the *heartburn*.

Nor have we conceived it requiſite to point out the particular diſhes that ſhould be eaten, or the kind of wine that may be drank, with leaſt hazard of incurring diſeaſe: it is not in every man's power either to indulge his choice, or to follow advice in theſe particulars; but every man can diſcover what quantity over-loads his ſtomach, and is at liberty to regulate his meals in this reſpect.

Having, we truſt, ſufficiently ſhewn how far *lazineſs* and *luxury* may be conſidered as the original principal cauſes of the gout; it remains for us to conſider in what degree diſcontent of mind, vexation, grief, or anxiety, may be ſuppoſed to contribute to the exiſtence and continuance of this diſeaſe.

And though it is not in human nature to reſiſt wholly thoſe impulſes of paſſion which ariſe from injuries either ſuſtained or apprehended; though it may not be either in our power or our inclination to loſe at once the remembrance of a departed friend, or to conquer the anxieties which are occaſioned by a ruined fortune; yet Reaſon may be called in to regulate the violent tranſports of grief, and to limit the duration of vexation; and her directions will in all caſes help us to reſtrain the diſcontent which ariſes from ordinary diſappointments, and the chagrin which is brought on by thoſe inconveniencies, which we only endure in common with the reſt of mankind.

The firſt effect of *anger*, *grief*, or *vexation*, is to take off the action of the ſtomach, and deſtroy the powers of digeſtion; and this is a conſequence ſo univerſally felt, that there are but few perſons in the world who have not at ſome time or other experienced it, though it is not to our preſent purpoſe to enquire what connection ſubſiſts between the digeſtive faculties and the animal ſpirits, a diſquiſition well worth the attention of the learned and ingenious.

But the miſchief does not ſtop at this pernicious effect of obſtructing the natural powers of the ſtomach and inteſtines; the circulation of the blood is affected by it; the motion of the heart, which in perfect health is as regular as that of the pendulum of a clock, is diſturbed and agitated; the vibration becomes interrupted and uneven; and flutterings, palpitations, and other ſymptoms of a redundant flow of blood to the heart, are ſucceeded by languor, faintings, and other ſigns, that it does not receive a due quantity: under this irregularity in the great functions of life, the ſecretions muſt be equally uncertain; and this accounts for the quantities of pale urine which are diſcharged by thoſe who are under the immediate influence of particular paſſions; for the torrents of involuntary tears which flow with irreſiſtible violence in thoſe circumſtances; for the overflowing of the mouth with water inſtead of ſaliva or ſpittle; and for the variety of other nervous and hyſterical appearances which are known to proceed from the unreſtrained operations of different paſſions.

Hence epileptic and other fits, ſwoonings, ſlow fevers, and many other kinds of diſeaſes, the cauſes of which have often puzzled the moſt ſkilful phyſicians, and left them to attempt the cure of a diſorder, for the origin of which they have been totally at a loſs.

Not that theſe effects are always immediately viſible; grief and vexation ſometimes act almoſt imperceptibly, gaining ground on health by ſlow but ſure gradations, producing firſt a decreaſe of appetite, then heartburn, and riſing to indigeſtion by regular ſteps; under theſe circumſtances the aliment which is conveyed into the ſtomach either turns ſour, rancid, and bitter, or haſtens through the body without ſuffering the neceſſary changes, ſo that the requiſite wholeſome materials of nouriſhment do not paſs into the blood, and the patient's habit of body becomes univerſally bad, and he either waſtes to death in an atrophy, or receives a reſpite in the form of the gout or ſome other chronic diſeaſe.

Want of ſleep is another evil produced by diſcontent or anxiety of mind: he whoſe ſoul is tortured with grief, or corroded by diſappointment and care, will find thorns in his pillow; the ſolitary moments which ſhould be dedicated to repoſe, will be filled with reſtleſs anguiſh; if he ſlumbers, he will be diſturbed by dreams, and haunted by fantaſtic ideas; the object of his uneaſineſs will be perpetually before him; and the little reſt he obtains will be unnatural and unrefreſhing.

It is in ſleep that all thoſe works which contribute to nouriſhment are performed, and thoſe fine and delicate parts of the human body which are worn and fatigued with the unremitting ſervice of the day, are renewed in ſtrength and reſtored to vigour; in ſleep the action of the body is univerſally regular, an equal diſtribution of blood takes place to an atom, each minute veſſel receives it's portion without the ſmalleſt obſtruction or hindrance, and in conſequence the pulſe is regular and ſlow, the breathing deeper and more equal, and a like degree of warmth ſpreads through the whole frame, from the extremities to the immediate ſeat of life.

But all theſe neceſſary functions of nature are impeded by the effect of vexation or diſcontent, operating ſo as to weaken the organs of digeſtion and concoction, and to diſturb and obſtruct the regular progreſs of nutrition, and producing the ſame diſeaſes as are occaſioned by a courſe of continued intemperance and exceſs; for indigeſtion, whether it proceeds from the ill quality and improper quantity of food, or from the influences of the cauſes laſt mentioned on the digeſtive powers, will equally occaſion heartburn, flatulencies, hiccups, belchings, and all the train of ſymptoms which uſher in the gout, which is univerſally admitted to be a diſeaſe of crudity and indigeſtion.

That violent paſſions of other kinds may alſo be in ſome meaſure productive of this, as well as other chronic diſeaſes, cannot be doubted; nor need we adduce any other arguments in ſupport of this opinion, than may be found in a preceding chapter of this work, wherein we treated *of the effect of the paſſions on the health of the human body.*

If from the foregoing pages it ſhall appear that the cauſes we have aſſigned are undoubtedly the original ſources of this diſeaſe; from a compliance with the very few eaſy rules we have laid down reſpecting *exerciſe, moderation in diet,* and *ſerenity of temper* and *diſpoſition,* great hopes may be entertained that this troubleſome companion may be for ever excluded from our conſtitutions; and that inſtead of looking forward to the ſummit and decline of life with the horrid apprehenſions of excruciating pains and conſequential infirmities, we may rejoice in the proſpect of an eaſy, vigorous, and comfortable old age, and form flattering expectations of the enjoyment of life to the lateſt period of it's exiſtence.

It remains that we point out the regimen and treatment neceſſary to be obſerved by those who already labour under this diſorder, the medical aſſiſtance which may be given with ſafety and propriety, and the means which offer for the repair of a conſtitution broken down by repeated fits of the gout, and injured either by improper medicines, or by erroneous and imprudent management.

As this diſorder proceeds in a great meaſure from indigeſtion, however produced, and the approach of the fit is accompanied by fever, the appetite of the patient fails, and Nature wiſely ceaſes to prompt his deſires for food, which would only ſerve to nouriſh the diſeaſe; in this caſe the ſuggeſtions of common Reaſon ſhould, one would imagine, direct us to avail ourſelves of the hint ſhe gives, and to aſſiſt her efforts with low diet and diluting liquors; but how contrary is the practice! No ſooner does the patient refuſe to eat, than ſtrong wines and rich cordials are adminiſtered, *to keep the gout out of his ſtomach*; and what is the conſequence? Why the fever, thus urged, rages more violently, the paroxyſms are increaſed, and the duration of them extended; the patient's ſtrength is reduced by the continuance of the fit, and the diſeaſe at laſt ſeizes the vital parts: when, harraſſed with fever, and worn down with pain, his conſtitution is unable to withſtand the attacks of an enemy ſo injudiciouſly reinforced, and he falls a martyr to a diſorder, which nature and proper medical aſſiſtance would perhaps have carried off in leſs time than is ſpent in thoſe endeavours which bring him to the grave.

But ſhould theſe ill-judged offices of kindneſs terminate leſs fatally, and ſhould the patient, after the torture of a month or two, eſcape with life, the parts will in all probability be ſo obſtructed and weakened, that he will be left a cripple, and the very means uſed to reſtore him to any degree of ſtrength, will, in moſt caſes, ſerve to bring on another fit.

The conſtitution, habit of body, and accuſtomed manner of living of the patient, muſt, however, regulate the regimen as to food and liquors during the fit; in moſt inſtances, ſago, milk, and thin broths, ſhould conſtitute the food, and ſmall diluting liquors the common drinks: if the patient has been differently treated in former fits of the ſame diſeaſe, or if his courſe of life in the intervals is commonly high, it may be neceſſary to indulge him with even animal food, and a ſmall quantity of wine; but the proportions of both ſhould be reſtricted, and he may be brought by degrees to dilute the latter with water ſo as to deprive it of it's inflammatory qualities. Wine whey may alſo in theſe caſes be admitted, and a little ſpirit of ſal volatile, to the quantity of a tea-ſpoonful, or leſs, taken in a draught of the laſt mentioned liquor at night, will conſiderably aſſiſt perſpiration, the promotion of which is of great conſequence in this diſeaſe; ſage-tea, acidulated with the jelly of currants or other fruit, or with the elixir of vitriol, will alſo be an agreeable and uſeful mixture for common drink.

The parts affected ſhould be kept warm, and the perſpiration be excited, and this is the moſt likely means to diſcharge the gouty matter with ſpeed and ſafety: for this purpoſe flannels, furs, or ſoft wool, may be uſed indifferently; though ſome are of opinion that wool prepared by combing, and applied in the oil which is uſed in that operation, is moſt efficacious.

As long as the pain continues to be acute, and till the part is conſiderably ſwelled, it will be proper that the patient ſhould remain entirely in bed; and even after the pain and inflammation are abated, it will be adviſeable for him only to ſit up in the middle of the day, until he has regained ſtrength enough to uſe ſome kind of exerciſe.

During the paroxyſm medicine can afford but little aſſiſtance, yet the raging violence of it may be alleviated by gentle and tenderly operating laxatives; ſome have recommended a mild emetic in the firſt inſtance, where there is a ſickneſs or uneaſineſs of the ſtomach, and for that purpoſe have directed a ſmall quantity of ipecacuanha, or only to aſſiſt the intentions of nature by carduus or camomile tea; but we apprehend the operation of vomiting ſhould in this caſe be excited with caution, and that the following opening medicines may be uſed with more ſafety and equal ſucceſs.

Take of infuſion of ſenna, from two to three ounces, according to circumſtances—of Glauber's ſalts two drams—of ſpirituous mint water, three drams. Make a draught to be taken at night or early in the morning.

But if the fit is not remarkably ſtrong, or attended with any extraordinary degree of heat, the following.

Take *tinctura ſacra*, or the ſacred tincture, and the tincture of rhubarb, of each from four drams to an ounce, according to circumſtances. Make a draught, to be taken at night.

And if the laſt mentioned draught was taken as ſoon as the ſymptoms of approaching gout appeared, and repeated once or twice, the violence of the threatened diſorder might be much leſſened, or probably the whole of the complaint prevented.

Nor will ſmall doſes of magneſia, or ſuch other medicines of the ſame claſs as ſerve to abſorb and correct the acrimony of the juices, be improperly adminiſtered; and when the pains are violent, gentle opiates may be given without the uſual apprehenſion; for this purpoſe either the ſaponaceous pill, or a few drops of the liquid laudanum, may be uſed diſcretionally: eaſe and ſleep promote perſpiration, which is the great channel of relief in this diſorder.

The common practice of vomiting, purging, bliſtering, bleeding, and drains, as in other fevers, we have ever conſidered not only as inefficacious, but as actually prejudicial; at beſt the relief procured is but temporary, and this is obtained at the expence of reducing the patient's ſtrength, and injuring his conſtitution, by depriving him of a quantity of wholeſome juices as well as the morbid humour; very gentle emetics under particular circumſtances, ſuch laxatives as may ſerve to keep the body open, and the loſs of a ſmall quantity of blood where the patient is young and vigorous, are the only evacuations that ought to be permitted in the gout; the latter operation will in ſome caſes mitigate the pain in a ſevere fit, and render it endurable, and perhaps may be a better way of treating it with regard to future conſequences, than ſuffering it to take it's courſe, without any attempt to alleviate the patient's anguiſh, or ſhorten the duration of the paroxiſm.

Endeavours to obtain relief in this diſorder from external applications are very generally decried; and where they tend to repel the gouty humour after it has been thrown upon the extremities, they are unqueſtionably pernicious and dangerous; but we are inclined to believe that cataplaſms of bread and milk, or ſuch other mild compoſition, may be applied with ſafety to the raging limb, which would conſiderably aſſwage the pain, without checking the progreſs of the diſeaſe: poultices of rye meal have been recommended, but we have known inſtances where they have rather augmented than diminiſhed the pain, and where the application of them hath been followed by extreme and unuſual weakneſs of the parts.

The following medicine hath alſo been recommended, whether the gout is accompanied with a conſiderable fever or not.

Take of the volatile tincture of guaiacum, half an ounce—of the mucilage of gum Arabic, as much as will conveniently incorporate the tincture; add by degrees an ounce and half of barley-water, and half an ounce of the balſamic ſyrup. Make a draught to be taken at going to reſt, and to be repeated twice or thrice in the day as occaſion may require.

When the fit declines, the ſkin begins to peel off, and the urine drops a conſiderable ſediment, it will be right to adminiſter a few doſes, more or leſs according to circumſtances, of the tincture of rhubarb, prepared with gentian, orange-rind, and other bitters, or of ſome other bitter ſtomachic purge; after which the following mixture may be taken twice a day, in quantities from two to three table ſpoonfuls, in proportion to the age and ſtrength of the patient, and the manner in which he is affected by the conſequences of the attack.

Take of the bark in powder, two ounces—of dried orange-peel, one ounce and half—of virginian ſnake root, three drams—Engliſh ſaffron, and cinnamon bruiſed, of each two drams—of French brandy, one pint and half. Infuſe a few days.

But if the patient's ſtomach will bear it, an ounce of the powdered bark may be divided into twelve parts, and one given in a glaſs of wine and water, or wine alone, twice a day, inſtead of the foregoing mixture.

The following ſtrengthening draught is alſo recommended.

Take of the ſimple bitter infuſion, one ounce and half—aromatic tincture, chalybeat wine, and ſyrup of ſaffron, of each one dram. Make a draught, to be taken twice a day, about noon and in the middle of the afternoon.

But though the efforts of medicine may alleviate the violence of the pain in ſevere paroxiſms of the gout, and contribute to the reſtoration of ſtrength after the ſymptoms are abated, yet we muſt look to other means for the cure of the diſorder, and for the prevention of thoſe returns which will ſurely follow the continuance of the ſame courſe of life by which it was originally produced.

Whoever has ſeen a gouty patient labouring under the acute pangs of the diſeaſe, and ſuffering the inconveniences which ariſe from the conſequent weakneſs and debility, or has heard him not only lament his immediate anguiſh, but expreſs the keeneſt apprehenſions of the more diſtant effects of it, would be apt to conclude that no terms could be offered on which he would not accept future eaſe, health, and ſtrength: yet ſo generally do our appetites get the better of reaſon, that though a certain cure is held out to him on conditions compatible with the enjoyment of all the pleaſures of life, he prefers returning to his former habits, with the certainty of being again viſited by the ſame diſeaſe, aggravated as he has reaſon to apprehend every ſucceeding fit will become, to the purchaſe of an indemnity from pain, at the eaſy price of giving up his propenſities to indolence, exceſs, and ill humour, and purſuing a ſyſtem in itſelf infinitely more rational, as well as more ſalutary, and which, after a very little practice, would become as pleaſant as it is profitable.

Such a ſyſtem we now mean to offer to our readers; and to ſuch of them as have prudence enough to embrace, and patience enough to perſevere in it, we may venture to promiſe a perfect cure of a diſorder, which, whatever may be pretended by preſuming empirics and intereſted practitioners, has ever baffled the efforts of medicine, and the ſkill of the moſt able and ingenious phyſicians.

We ſhall begin at the period when the fit is on the decline, and ſet out with a full perſuaſion, that a proper attention to rules and regimen will render the return of it improbable in moſt caſes, and leſſen the violence of the return in all.

Before the patient is able to exerciſe himſelf by the uſe of his legs, let his body, and all parts of it, be gently rubbed and chafed with dry warm flannel cloths, or a fleſh-bruſh; and let this be continued till a gentle perſpiration is excited; at which time it will be proper to give over, and to cover the patient either with his cloaths, or in the bed, if he has not yet left it, as ſpeedily as poſſible; and this practice ſhould be repeated ſeveral times in the day, or at leaſt morning and evening.

His next effort muſt be to walk, and he muſt not be induced to abandon his attempts to uſe his legs by the pain and fatigue which it will at firſt neceſſarily occaſion; the inconveniences will decreaſe and wear off by degrees, and the walk muſt be lengthened in proportion to his returning ſtrength: as ſoon as he has acquired ſufficient for the purpoſe, a carriage will afford him exerciſe of another kind, attended with ſomewhat leſs pain and trouble; and riding on horſeback will be of ſingular uſe, as ſoon as he is able to endure that kind of motion; but his ability to bear a carriage or riding, muſt not prevail on him to give up his rubbing and walking; the variety of exerciſe taken at different parts of the day will keep the body in a perpetual perſpiration, and promote the circulation of the fluids through it's fineſt and moſt minute parts.

But this part of the regimen muſt in no caſe be carried ſuch lengths as to produce conſiderable fatigue, or at leaſt not in ſo great a degree as to bring on any indiſpoſition, which will exiſt beyond the duration of the wearineſs which occaſions it; nor ſhould the patient by any means expoſe himſelf to ſharp or damp air, or to the chilling dews of the evening.

Meantime regulations muſt take place with reſpect to the patient's food and liquors; the former ſhould be of that kind which is light and moſt eaſily digeſted, beginning with the mildeſt kinds firſt, and advancing to others more heavy and of firmer texture, as he feels his ſtrength, appetite, and digeſtive powers, return; always obſerving, not to overload the ſtomach by any conſiderable quantity at a meal, or to repeat the uſe of any food which has once turned ſour, bitter or rancid, or remained on the ſtomach undigeſted.

The patient will begin his animal diet with dinners of calves feet, chicken, rabbits, partridges, whitings, ſoles, turbots, lobſters, crabs, cockles, and in particular oyſters, which ſhould be eaten raw without vinegar or pepper; and proceed by degrees to veal, lamb, pork, mutton, beef, and every other kind of animal fleſh, but none of theſe ſhould be eaten newly killed, nor with the addition of any other ſauce than their own gravy, which ſhould never be extracted by over-dreſſing.

Nor need he refrain from moderate quantities of the luxuries of the table; he may be indulged with pies, puddings, cuſtards, creams, jellies, and every ripe fruit of the ſeaſon, but none of the former ſhould be taken after a plentiful meal, but as conſtituting a part of it: in the former caſe they are far from being prejudicial; in the latter, they may be properly conſidered as exceſſes, and will in general be followed by the uſual conſequences of this ſpecies of intemperance.

Vegetables of moſt kinds are peculiarly wholeſome, but they ſhould only be boiled in water, and not ſtewed with gravy or ſpices; and lettuce, endive, cellery, and other ſalled herbs, may be eaten raw, with oil and a very moderate quantity of vinegar.

In the choice and quantity of liquors, great caution is neceſſary; thoſe who have been accuſtomed to drink plentifully of wines, will find this the beſt time to break through a habit which, in order to the preſervation of health, muſt be in a great meaſure relinquiſhed: if the directions we have given have been obſerved during the continuance of the fit, the patient will have been ſomewhat weaned from the free uſe of wine by the time he begins to recover; let him ſeize the favourable opportunity, and forbear to renew a practice which is wholly inconſiſtent with his views of health; if, inſtead of daily draughts of wine, he dilutes it with water, or which is ſtill better, if he exchanges this liquor for mild, fine, and well-concocted ale or porter, he will find the recovery of his health rather accelerated than impeded by the alteration, and he will enjoy the pleaſing reflection, that he is preparing his conſtitution to reſiſt future attacks of the diſeaſe.

Attending ſtrictly to this regimen, little phyſic will be neceſſary, though a few doſes of rhubarb and magneſia, and infuſions of any of the bitter herbs, taken at the changes of the ſeaſons, may not be altogether improper.

If, after perſiſting in this courſe, the patient ſhould have any return of the gout, he will find the fit ſhorter and leſs ſevere, and the effects of it leſs painful and injurious; there is little reaſon to apprehend it will viſit him a ſecond time, but if it ſhould, the impreſſions of it will be ſtill weaker and more faint.

Having fairly routed the diſeaſe, and repaired the health, ſtrength, and vigour of the conſtitution, ſome relaxation even from this regimen, indulgent as it is, may be admitted, and the patient may be permitted to conſider himſelf as only under the neceſſity of guarding againſt the approach of a diſorder to which he may be again liable; for which purpoſe he may recur to the former part of this chapter, and obſerve the rules he will find there concerning exerciſe, diet, and equanimity of temper and diſpoſition.

And now we appeal to the judgment and ſenſe of our readers, whether the courſe of life and regimen which we have preſcribed is not in all reſpects eaſy, pleaſant, and comfortable; and whether there be the ſmalleſt degree of hardſhip or difficulty in complying with every rule which this ſyſtem contains, the whole of which is compriſed in this ſingle poſition, *that an effectual cure for the gout may be obtained by exerciſe, moderation in diet, and the exertion of thoſe faculties with which God hath endowed us in reſtraining and governing our paſſions.*

After having dwelt ſo long on this prevalent diſeaſe, it may perhaps be expected that we ſhould take ſome notice of certain popular medicines, which have at different times, and by different perſons, been eſteemed infallible remedies for the gout; the principal of which are, the Duke of Portland's, and Le Fever's powder: of the latter, little more is known, than that no proof has been made of any cures effected by them, and that ſome of thoſe who tried them were of opinion, that they rather tended to increaſe than to remove the diſorder; whether this was the effect of the medicine itſelf, or occaſioned by the imprudence and miſmanagement of thoſe to whom they were adminiſtered, it is not in our power to determine; but we are of opinion, that whoever has relied on this, or any other medicine, for the cure of the gout, and the prevention of it's future attacks, taking the liberty to live as uſual, and to indulge every appetite and paſſion without controul, has placed confidence in what never did, and (as we apprehend we have ſufficiently ſhewn) never can happen.

The following is the compoſition of the Duke of Portland's powder for the gout or rheumatiſm.

> Take the dry leaves of round birth-wort and gentian, the tops and leaves of ſmall germander, leſſer centaury, and ground pine, of each equal parts—powder them all together.

Of this powder, a dram is directed to be taken in any convenient liquid, every morning faſting for three months—during the next three months, two ſcruples, in like manner every morning—after that, half a dram each day for the ſucceeding ſix months—and during the whole of the ſecond year, half a dram every other day.

Under this tedious proceſs many cures are ſaid to have been performed by theſe powders; but the credit of them hath been lately conſiderably leſſened, an opinion prevailing which ſeems to be well founded, that if they operate at all to prevent this diſeaſe, it is by exciting and keeping up ſuch a degree of fever as to prevent the gout from fixing on any particular part, and not by expelling and carrying off the gouty matter; in which caſe, inſtead of being a remedy for this diſorder, they only ſerve to conſtitute another.

Various directions and preſcriptions are to be found in different authors for *gout in the head, lungs,* and *ſtomach*, and for that ſtate of the diſorder which has been denominated *a wandering gout*; as alſo for *gouty colic* or *gout in the inteſtines, gouty diarrhœa, gouty aſthma*, and a great variety of other diſorders, which are ſuppoſed to be occaſioned by gouty matter, or to ariſe from habits of body diſpoſed to this diſeaſe: and we ſhall ſubjoin a few of the preſcriptions which are adapted to ſome of theſe particular caſes; though we beg leave to obſerve, that they ſhould be applied with caution and diffidence, becauſe it is not eaſy to aſcertain that theſe complaints are of a gouty nature; and becauſe, if that ſhould really be the caſe, they will in general give way to the treatment, regimen, and medicine, which we have directed in regular fits of the gout.

For the *gout in the ſtomach*, attended with heat, difficulty of breathing, oppreſſion of the ſtomach, belching, nauſea, and ſickneſs, a gentle vomit is adviſed; after it's operation a laxative clyſter, and a moderate doſe of Venice treacle.

If the ſickneſs continues and is attended with conſiderable diſcharges of vomiting, give from eight to ten drops of liquid laudanum in a glaſs of cinnamon or mint water; after which the following powder is directed, to haſten the diſeaſe into the extremities.

Take of filings of iron, from five grains to ten—of Virginian ſnake-root powdered, one ſcruple. Make a powder.

Or, infuſe two ounces of garlic root, bruiſed or ſliced, in a pint of French brandy for two or three days. Of this give two or three ſpoonfuls, once, twice, or thrice a day, according to circumſtances; adding to each doſe, from ten to fifteen drops of the tincture of the flowers of iron.

The following draught hath alſo been recommended in this caſe.

Take of ſimple common mint water, one ounce and half—of the leſſer cardamom ſeeds, two drams—of Virginian ſnake-root powdered, ſix grains—of the cordial confection, one ſcruple—of ſalt of hartſhorn, ſix grains—of ſyrup of ſaffron, one dram. Make a draught, to be taken every fourth or ſixth hour.

Or, take of Virginian ſnake-root powdered, half a ſcruple—of the cordial confection, one ſcruple. Make a bolus, taking after it two ſpoonfuls of the following mixture.

Take of ſimple peppermint water, three ounces—of the cordial confection, one dram—of tincture of ſnake-root, three drams—of ſalt of hartſhorn, half a ſcruple—of balſamic ſyrup, three drams.

If the gout is apprehended to have fallen on the *lungs*, and to have occaſioned an inflammation, attempts are directed to be made by ſuch medicines as promote perſpiration, and by external applications, to bring the gout into the extremities; treating the diſorder in other reſpects wholly as a peripneumony.

When the gout is ſuppoſed to have ſeized the *head*, it hath been uſual to cup and bliſter the arms, legs, and ancles; to bathe the feet in ſome ſpirituous fomentation, adding to it common ſalt and flour of muſtard; and to give a pretty large doſe of the *tinctura ſacra*, or ſacred tincture.

If the *colic* is conceived to proceed from gouty matter falling on the inteſtines, magneſia is adviſed to be given frequently, in caſe acids prevail in the firſt paſſages; but if bilious ſymptoms appear, bitter laxative infuſions are preſcribed, and afterwards the chalybeats, recommended for removing the gout from the ſtomach, are alſo directed to be uſed in this caſe.

When *aſthmatic ſymptoms* are believed to be occaſioned by gout, gum ammoniac is given as a remedy for thoſe which denote a tendency to the dry aſthma; and diuretics, perpetual bliſters, and other drains, are ſaid to be efficacious in the moiſt aſthma ariſing from the ſame cauſe.

But, after all, we are of opinion, that medicines of all kinds, and eſpecially warm ones, are in moſt caſes better omitted, and have rather offered theſe preſcriptions and directions in reſpect to the judgment of others, than becauſe we approve of them ourſelves: laxatives are at moſt times uſeful, in many caſes abſolutely neceſſary; but if the body is kept open, and perſpiration excited by proper warmth and diluting liquors, other remedies may be diſpenſed with, without incurring any riſque of dangerous conſequences from any turn the diſorder may take: unleſs the conſtitution be miſerably broken, the gout ſeldom quits the extremities, and when that is the caſe, heating and ſtimulating medicines will be more apt to aggravate diſagreeable ſymptoms, than to bring relief.

C H A P. VIII.

Of the Rheumatiſm.

THE *rheumatiſm* is a painful diſeaſe, affecting the intermediate ſpaces between the joints and muſcles in different parts of the body. It is of two kinds, diſtinguiſhed by the appellations of *acute* and *chronic rheumatiſm*: the former is attended with a fever, the latter is unaccompanied by inflammatory ſymptoms.

The rheumatiſm prevails moſt in ſpring and autumn, and attacks perſons of all ages and conſtitutions; but thoſe are moſt ſubject to it, who are expoſed to wet, cold, and the viciſſitudes of weather, and who are ill clothed, coarſely fed, and reſide in a low, damp, or moiſt ſituation.

The principal cauſe of this diſorder is an irritating acrimony in the juices, which may be the effect of chronic diſeaſes viciating the humours, or may be occaſioned by the circumſtances abovementioned; by obſtructed perſpiration; ſudden and violent changes from heat to cold; exceſſive uſe of ſpirituous liquors; wet feet; damp beds, rooms, and houſes; by ſuppreſſion or exceſſive diſcharges of cuſtomary evacuations; or by whatever may conduce to the production of an inflammation in the part affected.

The ſymptoms of *the acute* or *inflammatory rheumatiſm* are a fever, and pains in the limbs, generally in the joints, preventing their motion, and accompanied with heat, redneſs, and a ſwelling of the part: when the pain is fixed, the fever commonly abates, though in ſome caſes it continues ſeveral days, during which it is always moſt violent towards the approach of night. After the pain has affected one part for a few days, it frequently quits that, and attacks another; and the feet, ancles, knees, hips, loins, nape of the neck, ſhoulder-blades, ſhoulders, arms, elbows, and wriſts, are at different times the ſeats of the pain; but the parts in which it is moſt ſeverely felt are the neck, loins and hips: theſe pains alſo occaſion ſuch a tenderneſs, that the leaſt motion or touch is productive of the moſt acute ſenſations.

The violence of the acute or inflammatory rheumatiſm, does not often continue above twelve or fourteen days, but the weakneſs and ſwelling will remain much longer, even months, if the winter approaches, before the diſorder itſelf goes off: in ſome caſes, after the pains are abated, a laſſitude, or general reſtleſſneſs, ſucceeds, which is relieved by the appearance of ſome ſort of eruption on the ſkin.

In the *chronic rheumatiſm* the pains are confined to a few parts of the body, as the ſhoulders, back, or loins; but they are of longer continuance, and ſeldom occaſion any viſible alteration in the parts affected, though they are ſometimes hot and apparantly inflamed, as in the acute kind.

Whilſt the ſeat of the pain is in the external parts, the danger is not great; it is ſtill leſs when the extremities only are affected by it; but if it is ſeated on any of the internal organs, fatal conſequences may be dreaded: when the rheumatiſm attacks the brain, it occaſions delirium; if the lungs are affected, a ſuffocation follows; and ſhould it ſeize the bowels or ſtomach, dangerous inflammations of thoſe parts may be apprehended. It has been remarked, that wherever a rheumatiſm is ſeated, that part never ſweats, but that as ſoon as a perſpiration can be excited in it, the diſorder begins to abate; and when in either the acute or chronic rheumatiſm the decreaſe of pain is accompanied with free and general perſpiration, and the urine flows copiouſly, and appears foul or diſturbed, a ſpeedy cure may be generally expected.

When the pain continues a very conſiderable length of time in one joint, the motion of it may be ſo impaired as not to recover during life; and fixed wry necks have been ſometimes aſcribed to tedious and repeated rheumatic pains in that part.

In both kinds of rheumatiſm a low and cooling diet is neceſſary; ſpoon-meats, ſuch as ſago, milk, and thin broths, with fruits of all kinds, will be the proper food; and of all liquors, whey is the moſt ſalutary in this diſorder: it may be made with wine or cyder, or in ſevere pains, of muſtard or cream of tartar, which latter hath been highly recommended; if the whey ſhould tire or diſagree with the ſtomach, decoctions of tamarinds, and infuſions or tea of the emollient herbs, may be ſubſtituted; imperial water is alſo an agreeable and wholeſome compoſition for common drink, and is made as follows.

> Take a dram of cream of tartar, and a ſmall piece of freſh lemon-peel; pour on them a quart of boiling water. Stir the whole well together, and let it ſtand till it is cold; it may be ſweetened with ſugar to the patient's palate.

If the patient be young and vigorous, or of a full and ſanguine habit, bleeding will be abſolutely neceſſary; but it ſhould be performed cautiouſly, and only when the feveriſh ſymptoms run high, and when wandering pains ſhift ſuddenly from the limbs to the internal parts, oppreſſing the breath, and affecting one or both ſides; in this caſe it may be neceſſary to repeat this operation, if the ſymptoms do not give way; but we ſhould be as ſparing as poſſible in drawing blood, as very free diſcharges in this way frequently lay a foundation for chronic rheumatiſm.

After bleeding, laxative clyſters may be given; and if any uneaſineſs approaches the head, they ſhould be repeated night and morning; the body may alſo be kept open by ſenna, tamarinds, or any other cooling and gently operating medicine.

In the inflammatory rheumatiſm nitre is

peculiarly uſeful, and where the patient is ſtrong and robuſt, may be given in almoſt any quantities the ſtomach will bear, diſſolved in his common drinks; but where the ſtomach rejects it in this way, the following draught may be adminiſtered.

Take of the camphorated julep, one ounce and half—of the ſpirituous alexiterial water, two drams—of ſalt of hartſhorn, eight grains—of pure nitre, one ſcruple—of ſimple ſyrup, enough to make a draught. To be taken every fourth hour.

And in this form, nitre is given to advantage in the decline of the inflammatory rheumatiſm, and in every ſtage of the acute.

Opiates have been recommended when the pains have been violent, but they ought not to be admitted till the evacuations of bleeding and purging have taken place; and whenever adminiſtered, ſhould only be given in quantities ſufficient to moderate the pain, and not to occaſion ſleepineſs. Perhaps half a ſcruple of the ſaponaceous pill, taken at bed time when the pain is generally moſt troubleſome, may anſwer this purpoſe.

Baths of pure ſoft water, heated ſo as to produce an agreeable ſenſation in the ſkin, may after the evacuations afford eaſe; the patient ſhould be placed in the water, and kept there half an hour, or longer, as circumſtances direct, or if this ſhould not be practicable, flannels wrung out of it may be applied repeatedly to the parts affected: in both caſes great care is neceſſary to avoid taking cold, the ſkin ſhould be rubbed perfectly dry, and the body covered with blankets, to excite, if poſſible, immediate perſpiration; indeed, it will be right that the patient ſhould remain in bed, and endeavour to promote this evacuation, not only during the continuance of the fever, but even ſome time after the inflammatory ſymptoms have diſappeared.

In addition to whey, and the other diluting liquors which we have already preſcribed, and to any of which a ſmall quantity of Mindinerus's ſpirit may be added, the decoction of the Seneka root is recommended in ſuch quantities as may procure a ſweat.

Gum guaiacum is alſo adviſed, either in ſubſtance to the quantity of half a dram, with a dram of the cream of tartar, in a tea-cupful of whey, or the volatile tincture of guaiacum in the following form.

Take of pure water, one ounce and half—of the ſpirituous alexiterial water, two drams—of the volatile tincture of gum guaiacum, thirty drops—of the paregoric elixir, forty drops—of ſyrup of ſaffron, one dram. Make a draught, to be taken at going to reſt.

Or, take of gum guaiacum diſſolved with yolk of egg, one ſcruple—of common water, one ounce—of Mindinerus's ſpirit, three drams—of the ſpirituous alexiterial water, two drams—of ſyrup of marſh mallows, one dram. Make a draught, to be taken as above.

Such antimonial preparations as paſs off by perſpiration are alſo efficacious in this diſeaſe: the following draught may be given occaſionally, at proper intervals, between the doſes of other medicines.

Take of pure water one ounce and half—of the antimonial wine, fifty drops—of liquid laudanum, twenty drops—ſpirituous alexiterial water, and ſyrup of ſaffron, of each one dram.

Or this bolus.

Take gum guaiacum, and cinnabar of antimony, of each fifteen grains—of Venice treacle, half a dram—of ſyrup of marſh mallows, enough to make a bolus. To be taken once, twice, or thrice a day, drinking after it three or four ſpoonfuls of the following julep.

Take of ſimple alexiterial water, three ounces—of nutmeg water, one ounce—of ſweet ſpirit of nitre, two drams—of ſyrup of marſh mallows, half an ounce. Make a julep.

Or the bolus may be ſucceeded by a draught.

Take of the camphorated julep, one ounce and half—of the ſpirituous alexiterial water, two drams—volatile tincture of gum guaiacum, and ſyrup of ſaffron, of each one dram. And, if occaſion requires, one dram of the paregoric elixir.

Bliſters are frequently ordered to be placed on the part affected, though ſome are of opinion that bleeding it with leeches or cupping, is more immediately efficacious; but in the acute rheumatiſm, both methods ſhould be tried before the ſwelling comes on: in the chronic rheumatiſm, however, they are in general more ſerviceable, and may be uſed at any ſtage of the diſorder.

External applications are ſometimes ſucceſsful, ſuch as chafing the part with the volatile or ſaponaceous liniment, or applying plaſters, which ſome adviſe to be only of Burgundy pitch, and others of the following compoſition.

Take of rye meal or flour, one pound and half—of ſtale yeaſt, ſeven ounces—of common ſalt, two ounces—of warm water, enough to make a cataplaſm. To be applied to the part affected.

Rubbing the part with tincture of cantharides, of double and even treble ſtrength, is ſaid to have in ſome inſtances ſucceeded, when other applications have failed.

In chronical rheumatiſms mild mercurials, in moderate doſes, have been alſo adminiſtered with good effect.

Take of camphire, and nitre, of each ten grains—of opium, two grains—emetic tartar, and calomel, of each one grain. Let the whole be well beaten together, and make a bolus with common ſyrup.

In both kinds of rheumatiſm the bark is a remedy greatly to be depended on; but in the inflammatory ſtate of this diſorder, this medicine ſhould not be given till it appears to intermit, or at leaſt till plentiful ſweats are brought on, and a copious ſediment is obſervable in the urine: when the diſeaſe is chronical, and the patient free from feveriſh ſymptoms, it may be adminiſtered at all times with ſafety.

The bark may either be taken in doſes, from half a dram to a dram in ſubſtance, or in ſuch of the following forms as ſeem moſt ſuitable to the particular caſe.

Take of the extract of Peruvian bark, two drams—of gum guaiacum powdered, one dram—of the diuretic ſalt, half a dram—of balſam of guaiacum, enough to make the ingredients into forty-four pills; of which four may be taken thrice a day with three or four ſpoonfuls of the following julep.

Take of the camphorated julep, three ounces—of ſimple alexiterial water, one ounce. Mix.

Or, take of the decoction of Peruvian bark, two ounces—tincture of bark, and ſyrup of orange-peel, of each one dram and half—of the extract of bark, half a dram. Mix, and make a draught, to be taken every third or fourth hour.

Or take of the decoction of Peruvian bark, one ounce and half—the volatile tincture of gum guaiacum, and ſyrup of ſaffron, of each one dram—of gum guaiacum diſſolved with yolk of egg, one ſcruple. Make a draught, to be taken every ſix hours.

In the chronic rheumatiſm, immediate relief is not to be expected from medicine; a milk diet, exerciſe, bathing, eſpecially in the ſea, and the waters of Bath and Harrowgate, may contribute to the cure; to which ſhould be added, a dry and warm air, a flannel ſhirt next the ſkin, and a ſeton or other drain.

But the pains may be alleviated by proper remedies, and a ſweat generally procures preſent, though not always laſting eaſe, we ſhall therefore ſubjoin ſuch preſcriptions and common applications as have been found uſeful in the different ſtages and ſituations of this diſorder.

A ſweating bolus.

Take of powdered ipecacuanha, three grains —of nitre, half a ſcruple—of theriaca Andromachi, one ſcruple—of opium, one grain—ſimple ſyrup, enough to make a bolus. To be taken at going to bed.

Or, take of the kermes mineral, three grains —of camphire, four grains—of conſerve of hips, half a ſcruple—ſimple ſyrup, enough to make a bolus. To be taken as before. In caſe the conſerve of hips ſhould purge, omit it, and add the like quantity of Damocrates's confection.

An alterative decoction.

Take ſarſaparilla root, and ginſeng root ſliced, of each half an ounce—of China root, one ounce. Boil the whole together in two quarts of water, till it is reduced to one, and take from ſix to eight ounces moderately warm after either of the laſt mentioned boluſes, and again in the morning if it ſhould be neceſſary to promote perſpiration.

An antimonial electuary.

Take of conſerve of oranges, one ounce—of levigated cinnabar of antimony, half a dram—of gum guaiacum three drams—of the *cannella alba* powdered, one dram—of ſyrup of oranges, enough to make an electuary, which may be taken to the quantity of a nutmeg night and morning.

A guaiacum bolus.

Take gum guaiacum, and cinnabar of antimony, of each fifteen grains—of Damocrates's confection, half a dram—of ſyrup of marſh mallows, enough to make a bolus. To be taken twice or thrice a day, drinking after it three or four ſpoonfuls of the following julep.

Take of ſimple alexiterial water, ſix ounces —of nutmeg water, two ounces—of ſweet ſpirit of nitre, two drams—of ſyrup of marſh mallows, half an ounce. Make a julep.

Or the following draught may be ſubſtituted for the julep.

Take of the camphorated julep, one ounce and half—of the ſpirituous alexiterial water, two drams—the volatile tincture of guaiacum, and ſyrup of ſaffron, of each one dram. Make a draught, and add, if the patient is in great pain, one dram of the paregoric elixir.

The following remedies are calculated for ſuch as are not within the immediate reach of medicine.

Mix flour of brimſtone and honey in equal quantities. Take three tea-ſpoonfuls at night, and two the next morning, and one tea-ſpoonful on each ſucceeding night and morning, till the cure is compleated.

Take a tea-ſpoonful of white muſtard-ſeed twice a day, in a glaſs of white wine or wine and water.

Take the leaves and ſtalks of water-trefoil and ground-ivy, of each a handful—of camomile flowers, an ounce; pour on theſe herbs two quarts of boiling water, let it ſtand till cold. Pour off fine, and drink half a pint twice a day.

Bruiſe or ſlice half a dozen cloves of garlick, and infuſe them twelve hours in half a pint of ſmall white wine. Pour it off fine, and drink it going to bed. It frequently brings on a ſweat, and procures eaſe.

Let the patient confine himſelf to a diet of new milk whey, and bread, for a fortnight.

But, after all, we are inclined to believe, that Dr. James's powder, though not yet univerſally admitted into the preſcriptions of regular phyſicians, is the moſt ſafe, efficacious,

ficacious, and certain remedy, which has ever been offered for this diſeaſe; the mode of adminiſtering which, and proper directions of management, will be given when we treat of that and other popular medicines of the ſame claſs.

There are alſo other kinds of rheumatic pains, which are diſtinguiſhed by the names of *lumbago* and *ſciatica*.

The former is a pain in the ſmall of the back, which continues fixed in one particular part, and is moſt troubleſome upon any motion of the body; ſuch as ſitting up in the bed, riſing from a chair, or the like.

The *ſciatica* is a pain in the hip, which is alſo fixed to that part, producing lameneſs and incapability of moving the leg and thigh; and both theſe pains are unaccompanied with fever, and are tedious in the removal.

The treatment and cure of both theſe ſpecies of rheumatiſm, muſt be very nearly the ſame as we have directed in the former part of this chapter for the chronic kind of this diſorder; but iſſues and other drains are more particularly recommended when the pains are in the hip, and ſhould be placed as near as convenient to the part affected.

Volatiles, internally adminiſtered, ſuch as the ethereal oil of turpentine, given to the quantity of twenty or thirty drops, according to circumſtances, in a tea-cupful of the decoction of guaiacum wood, are often of great uſe, particularly if the part is alſo rubbed externally with the volatile liniment, or opodeldoc.

The following plaſter is alſo adviſed.

Take of Burgundy pitch, ſix parts—of euphorbium, one part—of Venice treacle, one part. Mix, and ſpread a plaſter large enough to cover the part affected.

The following electuary may be of uſe in theſe fixed pains.

Take of lenitive electuary, one ounce and half—of Æthiop's mineral, half an ounce—of gum guaiacum powdered, two drams—of oil of juniper, four drops—of ſyrup of marſh mallows, enough to make an electuary; of which the quantity of a nutmeg may be taken twice a day, drinking after it a wine glaſsful of a decoction of ſarſaparilla.

The balſam of guaiacum, taken to the quantity of a dram once or twice a day, according to the violence of the complaint, hath been ſerviceable; as have alſo the balſam of capivi, and the Canadian balſam.

The following is the compoſition of the balſam of guaiacum.

Take of gum guaiacum, half a pound—of the balſam of Peru, one dram and half—of rectified ſpirit of wine, three fourth parts of a pint. Mix the whole well together.

Muſtard whey is alſo peculiarly ſerviceable in old fixed pains in the ſmall of the back and hips, and ſome recommend rubbing the part affected with the dry flour of muſtard till an inflammation is produced, though others think the flour ſhould be mixed with warm water, and applied as ſoon as it affects the noſtrils powerfully.

The following are given as family ſpecifics for the ſciatica or rheumatiſm in the hip.

Rub the part affected with that kind of rum which is called Barbadoes ſpirit. It ſhould be done with a warm hand before the fire.

Bathe in cold water, and rub the part well with a fleſh-bruſh.

Pound equal quantities of the roots of burdock and elecampane together, and make a poultice, applying it cold to the part. This is apt to occaſion a preſent increaſe of pain, but is ſaid to remove it in twenty-four hours.

Boil nettles in a ſmall quantity of water. Foment with the liquor, and apply the herb as a poultice.

CHAP. IX.

Of Cancers.

A *Scirrhus* and *cancer* are generally mentioned as ſynonymous terms; but very eminent writers diſtinguiſh theſe terms, and ſay that if the ſtagnating matter of a ſcirrhus is put in motion ſo as to inflame the veſſels ſituated in it's margin, it becomes from thence malignant, and is then denominated a *cancer*.

A *cancer* is an equal tumor with or without an ulcer; when it is unburſt, it is ſaid to be an *occult cancer*; and when the ſkin is broken, and a thin, acrid, and fœtid matter is diſcharged from the ſore or wound, it is called an *open* or *ulcerated cancer*.

This diſorder may be ſeated in any part of the body, but more commonly affects the glands; men are moſt ſubject to the attacks of it in the mouth, tongue or arm-pits, and women in the breaſts or womb.

This diſorder is generally occaſioned by obſtructed excretions or evacuations; hence ſingle women, and in particular thoſe whoſe periodical diſcharges have ceaſed, are peculiarly liable to it; as well as thoſe women who have borne children but have not ſuckled them; women who have borne and ſuckled many children are ſeldom afflicted by it; and men are ſtill leſs often troubled with it.

When a *ſcirrhus* is once formed, whatever cauſes an increaſed motion of the humours, occaſions inflammation, and brings on pain and heat; and the ſcirrhus, which hitherto was inactive, acquires an acrimony, by which the containing parts are irritated and corroded; and thus the paſſions of the mind, and particularly thoſe of grief or anger, may eaſily convert a ſcirrhus into a cancer.

This diſorder may likewiſe ariſe from external injuries, ſuch as blows, bruiſes, conſtant leaning againſt a deſk or table in a particular poſture, or from too great compreſſion of the part, which frequently occaſions it in women, who accuſtom themſelves to draw their ſtays too ſtrait; it hath been alſo ſaid that it may proceed from improper food, from inactivity or a ſedentary life, and it hath been ſuppoſed to be in ſome caſes the effects of an hereditary taint.

As we have already obſerved, this diſeaſe is in it's firſt ſtate a ſcirrhus tumor, and may be deemed a cancer as ſoon as it becomes painful; that is, as ſoon as the matter contained in the tumor is ſet in motion; till that happens it is not eaſy to determine whether the diſorder is or is not of a cancerous nature.

In the firſt ſtate it often continues years without being troubleſome, and in ſome inſtances without increaſing in ſize, which perhaps may not exceed that of a hazel nut; but when an itching is perceived in it, followed by a pricking or ſhooting pain, and the colour of the ſkin begins to change, no difficulty remains as to the nature of the complaint.

It is in this ſtage of the diſorder that the diſtenſion of the veins around the tumour take the fancied appearance of crabs claws, and from this circumſtance the diſorder obtains it's name; though this ſtate of the ſurrounding veſſels hath been deſcribed by ſome as tumors beginning to extend itſelf, by puſhing out a kind of roots or limbs.

Thus formed, the cancer is an irregular, knotty tumor, of a duſky, purple, or livid hue, attended with a peculiar kind of burning piercing pain; and, when advanced ſo far, ſometimes, and eſpecially in women's breaſts, increaſes ſpeedily to a very great ſize, as more of the glands become obſtructed; though in other caſes the progreſs is ſlow, and the pains leſs violent, with ſuch frequent intervals of eaſe as to give the patient flattering hopes that no farther inconvenience will ariſe.

A cancerous tumour never ſuppurates like an inflammatory one, becauſe the obſtruction is in the minute lymphatic veſſels; but when it is ready to burſt, particularly in the breaſt, it generally grows prominent, and gathers to a point; and this change is accompanied with an augmentation of the burning ſharp pains commonly felt before, which alſo ſeem nearer the ſurface of the part affected. In this ſtate a corroſive ichor, or thin humour, oozes through the ſkin in the prominent part of the tumor, or the ſame kind of acrid fluid, tinged with blood, is found upon the ſurface of it; and in either caſe an ulcer is ſoon formed, the diſcharge from which continues to be thin, corroding, and extremely offenſive to the ſmell; the lips of the ulcer turn out, are of a dark and diſagreeable hue, and frequently bleed; and the pains become more acute, pungent, and excruciating.

In this aggravated ſtate of the diſeaſe, the patient ſuffers almoſt equally from the pain and the fœtid ſtench of the ulcer; the whole habit of body is vitiated; the appetite fails; a hectic fever, accompanied with profuſe night ſweats, wears the body down; and the unhappy victim of this loathſome complaint, either ſinks gradually under the complicated miſery, or is carried off by a violent hæmorrhage, from the ulcer itſelf, or from ſome other part of the body.

The diet ſhould be cool, moiſt, and light, conſiſting chiefly of ſpoon-meats, broths, vegetables, fruits, and white-meats; every thing ſalted, highly ſeaſoned, and hard of digeſtion, ſhould be carefully avoided; the drinks ſuch as are leaſt fermented or heating: the patient's mind ſhould be kept as tranquil as poſſible; and though ſome exerciſe is ſerviceable, yet it ſhould never be taken to ſuch a degree, as either to put the body in any violent motion, or to occaſion fatigue. A well-dreſſed hare's or rabbit's ſkin ſhould be conſtantly worn over the part, as well for warmth, as to defend it from accidental blows, preſſures, or other external injuries.

On the firſt appearance of ſcirrhous tumors, the patient ſhould immediately alter his manner of living, and confine himſelf to the regimen we have already directed; he ſhould looſe blood, according to habit of body and other circumſtances of conſtitution, and enter on ſome ſuch courſe of alterative medicines as follows.

Take of manna, one ounce—water, two ounces—nutmeg water, three drams—Rochelle ſalts, three drams. Make a potion, to be taken in the morning, and repeated twice a week.

On the days when the purging potion is not adminiſtered, the patient is adviſed to take a tea-ſpoonful of millepedes, or woodlice, either living or dried, and reduced to powder, morning and evening, with three or four ſpoonfuls of the following julep.

Take of water, three ounces—ſimple cinnamon water, and nutmeg water, of each one ounce—of pure nitre, one dram—of ſalt of hartſhorn, half a dram—of balſamic ſyrup, two drams. Shake the whole well together.

Or the following.

Take of Venetian ſoap, twelve grains—the vitriolic tartar, and rhubarb in powder, of each ſix grains—of oil of carraways, one drop—of balſamic ſyrup, enough to make a bolus. To be taken at bed-time, with two ſpoonfuls of the following julep.

Take of water, ſix ounces—of the ſtyptic tincture, one ounce and half—of ſimple ſyrup, two drams. Mix. This bolus and julep may be taken once, twice, or thrice a week, according to circumſtances.

Inſtead of the above medicines, ſome recommend the common purging mercurial pills to be given twice or thrice a week, and the part to be very gently rubbed with the mercurial ointment, and kept warm; and in this caſe it will be proper that the patient ſhould drink half a pint of the decoction of the woods twice a day.

Or the pill may contain from one grain to three of calomel, and an equal quantity of powdered rhubarb, which may be made into the form of a pill with Caſtile ſoap or crumb of bread.

The following is the preparation of the mercurial ointment.

Take of quickſilver, one ounce—of hog's lard, one ounce and half—of mutton ſuet, half an ounce. Rub the quickſilver in a warm mortar with half the hog's lard, till the globules are perfectly extinguiſhed; then add the remainder of the lard and ſuet, which ſhould in the mean time be melted together. Let the whole be perfectly well mixed by rubbing.

The following external application to the ulcer is recommended.

Take the compound powder of ceruſſe, and gum Arabic, of each two drams—of ſugar of lead, one ſcruple. Rub theſe well together in a marble mortar, and add by degrees three ounces of lime-water, and three ounces of roſe-water, mixed. Make a lotion.

Cleanſe the ulcer tenderly, then waſh it with this lotion ſomewhat warm, and cover it with dry lint, or lint dipped in the ſame lotion; over the whole lay a plaſter of the following cerate.

Take of ſugar of lead finely powdered, one dram and half—of olive oil, a jill—of white wax, two ounces. Rub the ſugar of lead well with one half the oil, and then add the mixture to the remainder of the oil and the white wax, melted together, and continue to ſtir the whole well till it is cold.

As an external application, the ſolanum, or nightſhade, is ſaid to be uſeful; the leaves of this plant may be beat to a poultice, or mixed with white bread and milk, and applied to the cancerous tumors: the deadly nightſhade, or the garden nightſhade, may be uſed indifferently for this purpoſe.

But an eminent phyſician of another country hath introduced a different herb, and recommended it as almoſt a ſpecific in cancerous caſes: and though it's efficacy may not be ſo very certain as he ſeems to apprehend, yet proofs are not wanting of it's having produced very good effects in a variety of inſtances.

This remedy is *hemlock*, a plant almoſt univerſally known, though it's peculiar virtue in the cure of this particular diſeaſe ſeems to be rather a modern diſcovery.

This herb may be adminiſtered, either in powder of the dried leaves, or in an extract, which may be made by expreſſing the juice, and thickening it to a conſiſtence fit to form into pills with the powder of the dried leaves: the patient is to begin with ſmall doſes of a grain or two, increaſing the quantity gradually as long as it can be taken without immediate injury, or until it produces favourable effects; in the former of which caſes it will be neceſſary to leſſen the quantity till no ill conſequence is viſible, and in the latter to fix the doſes to that quantity which hath apparently effected a change in the appearance of the diſeaſe. With ſome conſtitutions the quantities taken will be very conſiderable, even to the amount of two or three drams a day; with others much leſs will be ſufficient to occaſion the following marks of indiſpoſition: a giddineſs of the head, a motion in the eyes, as if they were thruſt outward by ſome internal force, a ſlight ſickneſs at th the ſtomach, a trembling or agitation of the body, and a looſe ſtool or two in the morning after the doſe; any one of theſe ſymptoms is ſufficient evidence that the doſes are large enough; but unleſs the ſymptoms are violently troubleſome, the ſame quantity ſhould be continued till it produces no diſagreeable effect, which will happen in a few days; even ſmall doſes offend ſome habits, occaſioning heat, thirſt, and twitchings, and in ſuch inſtances the uſe of it muſt be diſcontinued.

The dried herb may alſo be uſed in the form of tea, or ſmall quantities of it given in broth frequently; and the internal uſe of it may be aſſiſted very conſiderably by bathing the body in warm water wherein this herb hath been infuſed, by applying decoctions of it as fomentations, or the herb itſelf in poultices, to the parts affected: a tincture of hemlock may alſo be extracted by rectified ſpirits of wine, which may agree where the herb in ſubſtance cannot be taken.

A particular regimen is directed with the uſe of this herb; the patient is required to abſtain from all preparations of flour which are not well fermented, and from ſuch ſpices and aromatics as are highly pungent and acrid; but he is indulged in the uſe of a moderate quantity of acids, and good wine if he hath been accuſtomed to it; he is alſo adviſed to reſide in an open and pure air, and to avoid as much as poſſible whatever diſturbs or affects his mind.

But the beſt effects of this medicine are not pretended to be ſpeedily produced; a perſeverance in the uſe of it for two, and even three years, may be ſometimes neceſſary; nor will it be thought a hardſhip to continue it much longer, if it ſhould but have ſtopped the progreſs of ſo dreadful a complaint, the increaſing violence of which threatens nothing leſs than an inevitable and miſerable death.

The bark and mercury may alſo accompany the uſe of the hemlock, and theſe ſeveral medicines may be given as follows:

The extract or powder of hemlock, in quantity from one grain to five, according to circumſtances, twice a day.

The decoction of bark, from two to three ounces, three times a day; and

From one tenth of a grain to half a grain of white corroſive mercury twice a day. If the ſtomach is offended with the latter medicine, a few drops of liquid laudanum may be added to each doſe.

The wounds ſhould be kept perfectly clean, and for this purpoſe the water in which cabbage hath been boiled is recommended, or poultices of raw carrots grated may be applied twice a day, which will conſiderably leſſen the offenſive ſmell attending cancerous ulcers.

We have forborne to ſpeak of extirpating theſe tumors either by the knife, or by ſuch applications as conſume the diſeaſed part, becauſe they are both operations of ſurgery, and ought not to be attempted without proper aſſiſtance. It may not however be improper to mention Mr. Plunket's famous compoſition for the latter purpoſe.

Take of crows foot, growing in low damp grounds, one handful—of dog fennel, three ſprigs. Pound them well in a marble mortar; add to them of crude brimſtone and white arſenic in fine powder, of each three moderate thimblefuls; mix the whole well together, and make it into balls about the ſize of a nutmeg, which muſt be dried in the ſun; theſe balls being powdered and mixed with the yolk of egg, and then ſpread on a piece of hog's bladder, which has been previouſly ſmeared with the yolk of egg, may be laid on the cancerous part, to the ſize of half a crown or leſs, if the ſore or wound is in the face or near the ſeat of the heart, but if in any other part of the body, to the ſize of the ulcer. This plaſter muſt not be removed till it falls off of itſelf, which will happen in about a week, but in the mean time clean bandages ſhould be applied daily.

The following more ſimple treatment and remedies may be ſerviceable, and eſpecially in the early ſtages of this diſeaſe.

While the diſorder is in the ſcirrhous ſtate, let not the part by any means be handled, or preſſed by the cloaths, but kept as eaſy as poſſible.

Keep the body open with cooling medicines, ſuch as manna, Glauber's ſalts, or the like, or with this electuary.

Take of lenitive electuary, one ounce and half—magneſia, and flowers of brimſtone, of each two drams—of rhubarb powdered, two ſcruples—of oil of carraways, two drops—of ſyrup of roſes, ſufficient to make an electuary; of which the quantity of a nutmeg may be taken morning and evening, whenever there is the leaſt complaint of coſtiveneſs.

Avoid all ſpirituous and heating liquors, as well as medicinal cordials, and be peculiarly attentive not to excite any extraordinary degree of heat, by violent exerciſe of body, or agitation of mind.

If any degree of fever ſhould attend, bleeding will be neceſſary, and may be repeated, if the violence of the ſymptoms does not abate, or the pain is augmented with the fever.

When the tumor is yet in it's ſchirrhous ſtate, any ſlight inflammation which appears in the neighbourhood of it, may be relieved, and probably prevented from degenerating into a cancer, by waſhing it frequently with Goulard's ſaturnine water.

The following are family preſcriptions.

Take equal parts of red poppy water, plantane water, and roſe water—add a proportionable quantity of honey of roſes, and bathe the part frequently. After a time, the honey of roſes may be omitted.

Rub the whole breaſt, if that is the ſeat of the tumor, with the volatile liniment, morning and evening.

Apply a poultice of wild parſnip, the flowers, leaves, and ſtalks, beat fine: change it morning and evening.

C H A P. X.

Of the Scurvy.

AS we propoſe to dedicate a part of the work before us to the diſeaſes more immediately peculiar to ſoldiers and ſeamen; and as from circumſtances which at times attend thoſe engaged in both profeſſions, there is no diſorder to which theſe claſſes are ſo liable as the *ſcurvy*; we ſhall at preſent confine ourſelves principally to that ſpecies of it which has been denominated the *land-ſcurvy*, reſerving the deſcription and cure of the *ſea-ſcurvy*, to which however thoſe employed in military ſervice on ſhore are alſo from the ſame cauſes ſubject, for a future chapter.

The ſcurvy is a chronical diſorder of the putrid kind, and the immediate cauſe is the putreſcent ſtate of the blood.

Thoſe are moſt ſubject to this diſeaſe who live in low, damp, and moiſt ſituations, and particularly near marſhes which are overflowed by the ſea or other waters;

thoſe who inhabit damp or low houſes, paved with ſtone; and thoſe who lead inactive or ſedentary lives.

It may be occaſioned by cold, moiſt, or confined air; by an improper diet of any kind, ſuch as hard, dry, and ſalted, or crude, ſour, and waſhy food; it may alſo ariſe from the ſuppreſſion of any uſual evacuation, from the repulſion of eruptions on the ſkin, from thoſe paſſions of the mind which bring on hyſteric and hypochondriac complaints and melancholy, from a long uſe of mercury or the Peruvian bark, from infection, and as ſome conceive, from hereditary taints.

There is ſcarce any other diſorder which aſſumes ſo many ſhapes and changes, and lurks under the diſguiſe of ſo many different maladies; exhibiting ſuch a variety of ſymptoms and complaints, as to deceive thoſe who poſſeſs the greateſt ſkill, and have examined it with the moſt deliberate caution.

Among the various ſymptoms which denote this diſeaſe, the following ſeem moſt certain; an unuſual lazineſs, dulneſs, and diſinclination to every kind of exerciſe; an univerſal laſſitude or wearineſs, ariſing from no exertion or fatigue of body; a pain in the muſcles, as if they had been overſtrained or laboured, and particularly in thoſe of the loins and thighs; the ſame ſenſation on firſt awaking after a night's ſleep; and an inability to walk up or down hilly or uneven ground: theſe ſymptoms are ſucceeded by a ſhort and laborious breathing; the legs and ancles ſwell, but the ſwelling ſometimes diſappears and returns again occaſionally, the limbs in the mean time ſeeming heavy and indiſpoſed to motion; the ſkin becomes covered with ſpots, at firſt red, and afterwards brown or livid; the countenance becomes pale, ſallow, or of the colour of aſhes; the mouth begins to emit a fœtid ſmell; and the gums ſwell and grow painful, hot and itching, bleeding upon every ſlight touch, and ſhrinking from the teeth, which are left naked and uncovered, and frequently become looſe, and though the gums are unuſually red, or rather livid, yet they are ſoft, ſpongy, fungous, and putrid; wandering pains are felt in different parts of the body externally and internally, producing gripes, cholic, ſtitches in the ſide, pains in the breaſt and ſtomach, and even of the bladder, ſpleen, and liver; as the diſeaſe advances, the appearance of the gums becomes inflamed, bloody, and inclining to a gangrene, emitting a cadaverous and moſt offenſive ſmell; the teeth rot, the veins under the tongue gather into knots, hæmorrhages burſt through the ſkin without any apparent wound, and the blood, eſpecially, flows from the lips, mouth, gums, noſe, lungs, ſtomach, and inteſtines. In this ſtage of the diſeaſe, ulcers break forth of the moſt unpromiſing appearance, obſtinate of cure, and inflexible to every application; theſe are principally ſeated in the legs, but ſpread every way, diſcharging a thin acrid matter, intolerably fœtid; ſcurvy or ſcaly eruptions appear on the ſkin; the congealed part of the blood is black and clotted or curdled, but of a looſe and flabby conſiſtence; and the ſerum or whey-like part of it is ſalt and ſharp, with a greeniſh matter floating on the ſurface: the pains now become more intenſe, and particularly in the night, gnawing, darting, and ſhooting through the limbs, joints, bones, and inteſtines; and the ſpots or blotches are purple, black, or blue.

In the laſt ſtages of this diſorder, the patient is troubled with vomitings, purgings, fluxes, and dyſenteries; ſharp ſtranguries, or ſcalding pains, in diſcharging the urine; fainting fits on the leaſt motion or change of air; anxieties and oppreſſions, which frequently prove ſuddenly fatal; trembling, contractions of the limbs, paralytic ſeizures, dropſies, convulſions; and the ſcene ſometime cloſes with diſcharges of blood by vomitings and ſtools, or by a mortification of the bowels.

The regimen in this diſeaſe must be adapted to the ſymptoms; for the moſt part broths of white meats, jellies, fruits of all kinds, preparations of milk and vegetables, and ſuch like light and cooling food, with butter-milk, whey, hock or Rheniſh wine, cyder, perry, and wort, or beer which has not been fermented, for drinks, will conſtitute a proper diet, ſpruce-beer may alſo be taken medicinally, as well as decoctions of ſarſaparilla, marſh mallows, or the like, or infuſions of the bitter herbs, ſuch as ground-ivy, the leſſer centaury, and marſh trefoil or buckbean.

Change of air is of great uſe; and where the patient's uſual reſidence has been in a confined, low, or damp ſituation, is abſolutely neceſſary: the change ſhould be to one as free and open as poſſible, but it ſhould be a ſouthern or weſtern expoſure, ſheltered from the rude blaſts of north and north-eaſt winds.

Exerciſe is eſſential, but it muſt be taken cautiouſly; fatigue of body or mind is injurious, and for this reaſon the patient's attention ſhould be engaged in ſuch amuſements as may tend to excite chearfulneſs and good humour: in this reſpect much depends on the friends and attendants of the ſick, who ſhould ſtudy to gratify even the whims of thoſe whoſe intellects muſt be ſuppoſed to be in ſome meaſure affected by pains, weakneſs, and indiſpoſition of body.

The principal medicine to be depended on is the bark, which may be given in ſubſtance to any quantity that the patient's ſtomach will bear; the elixir of vitriol may alſo be mixed with the patient's common drink: and theſe, with other anteputreſcents, and ſuch other means as are uſed in the putrid fever, will be proper in this diſorder.

When the patient is cold, pale-faced, and his legs ſwell, but is not troubled with thirſt—

Take of the root of garden radiſh, four ounces—ſcurvy-graſs, and marſh-trefoil, or buckbean, of each two handfuls—of ſage, one handful. Infuſe two days in three quarts of white wine; then ſtrain off, and let the patient take from four to ſix ſpoonfuls, three or four times a day.

If, on the contrary, he is feveriſh, hot, and thirſty, if his breathing is difficult, and his gums begin to grow putrid—

Take of the root of ſharp-pointed dock, one ounce—of cream of tartar, three drams. Boil theſe half an hour in three pints of milk; ſtrain it off, and ſweeten to the palate with Britiſh honey. Let the patient take two or three ounces three times a day.

The *herba Britannica*, or great water-dock, hath been highly recommended for the cure of this diſeaſe; a decoction may be made by boiling a pound of the root in two quarts of water, till it is reduced a third part: of this a tea-cupful may be taken twice or thrice a day, increaſing the frequency and quantity as the ſtomach will bear it; but if any good effect is expected from this medicine, it muſt be perſiſted in for a very conſiderable length of time. An extract from the root may perhaps be taken with leſs inconvenience than the decoction, and prove equally efficacious.

Particular ſymptoms of this diſeaſe may be relieved by the following management: when the gums become ſpongy, they may be waſhed with a decoction of the bark, acidulated with the ſpirit of ſea-ſalt; when ulcers ſpread in the mouth, touch them now and then with the honey of roſes, acidulated with the ſame ſpirit; if a ſalivation comes on, which may poſſibly be occaſioned by the ſtricture of the ſkin, it muſt be diverted by bliſters applied to different parts of the body, and by ſinapiſms or warm plaſters to the ſoles of the feet and hams; in this caſe all methods muſt be tried to excite perſpiration, and for this purpoſe boluſes of camphire and theriaca may be repeated every three or four hours; and if the legs ſwell, gentle frictions will be uſeful. Ulcers in the legs may be treated like thoſe in the mouth; and in caſe of hæmorrhages, the dulcified ſpirit of nitre, and other acids of the ſame claſs, may be given at intervals; and when a fever attends, the mineral acids, or Clutton's Febrifuge Spirit, may be added to ſuch other medicines, as ſymptoms and circumſtances may require.

But where the patient can have free recourſe to vegetables and milk, it muſt be from neglecting to avail himſelf of theſe advantages that this diſorder becomes extremely troubleſome and dangerous; the variety of fruits and herbs, which are ſo plentifully diſtributed in all parts of Great Britain, offer ready and ſovereign remedies for the cure of the ſcurvy.

Among the ſallad herbs which may be deemed antiſcorbutics, are creſſes of all kinds, and particularly water-creſſes, ſorrel, endive, celery, lettuce, ſpinach, garden-radiſh, horſe-radiſh, parſley, and purſlain; all theſe may be eaten raw, but cabbage, carrots, cauliflowers, and a great variety of other vegetables, which are uſually ſerved at our tables, are alſo powerful remedies againſt this diſtemper.

Of the fruits of our own climate, apples, ſtrawberries, raſberries, and currants, are to be preferred; where the gums are principally affected, the juice of lemons, or ſour oranges, will frequently relieve; and ſweet or China oranges, eaten in conſiderable quantities, are of excellent uſe in ſcorbutic habits.

The following ſimple remedies are alſo preſcribed for this diſeaſe.

Take eight ounces of the inner bark of the elm, (from the ſmall branches if in the ſpring of the year, and from the ſpreading roots in the autumn or winter.) Boil it in four quarts of water, till one quart is conſumed. Of this decoction take one pint morning and evening.

Make a conſerve of wood-ſorrel, and take the quantity of a walnut three or four times a day.

Take three ſpoonfuls of the juice of nettles every morning.

Make a conſerve of Seville oranges, beating pulp and rind together, and take it freely.

Confine the patient entirely to a milk and vegetable diet, and let his only drink be new whey.

The Bath and Harrowgate waters are alſo recommended for the land-ſcurvy; bathing in them and taking them internally, they are often productive of the happieſt effects; and as the ſea-ſcurvy is relieved by the land air, ſo the land-ſcurvy frequently receives conſiderable benefit from the air of the ſea, and bathing in the ſea water.

CHAP. XI.

Of the Itch.

THIS is a diſeaſe of the ſkin, and is cauſed by very ſmall *animalculæ*, imperceptible without the aſſiſtance of a microſcope, of a whitiſh colour, in ſhape like a tortoiſe, having each ſix feet and a ſharp head, armed with two ſmall horns at the point, and covered over with ſo hard a ſhell, as in general to reſiſt the force of rubbing or other preſſure,

Though this diſeaſe is unqueſtionably

communicated by infection, yet cleanlineſs is a great antidote to it; nor does it often prevail among thoſe who enjoy the benefits of clean cloaths and habitations, good air, and wholeſome diet.

This diſorder generally appears in the form of ſmall watery puſtules, at firſt about the wriſts and between the fingers; afterwards on the arms, legs, and thighs, and particularly under the bendings; but it never affects the head. In the evening, when the patient approaches the fire, or begins to grow warm in his bed, the itching is intolerably troubleſome; in ſome caſes ſpots or blotches are diſtributed over the limbs and ſome other parts of the body, in others the ſkin is covered with a ſcurfy or ſcaly eruption; and under theſe latter appearances the diſeaſe is called the *dry itch*, and is more difficult of cure than when only the firſt mentioned ſymptoms occur, which ſtate of the diſorder is denominated the *moiſt itch*. Children are moſt liable to the moiſt itch, and grown perſons to the dry.

In the moiſt kind, the humour which fills the puſtules has the appearance of ripened matter, and the baſis of each is inflamed; but in the dry kind, the puſtules are of a ſmaller ſize, and filled with a thin acrid fluid, which, irritating the tender fibres under the external ſkin, occaſions heat and itching.

In both kinds of itch, and from whatever cauſe the diſorder proceeds, ſulphur is to be depended on for a cure; and it ſhould be uſed both internally and externally.

But, previous to the uſe and application of this medicine, if the patient is of a full habit, and the appearances of inflammation are conſiderable, it will be neceſſary that he ſhould loſe ſome blood, and at all events the body may be opened by ſome ſuch gentle purge as the following.

> Take of the common infuſion of ſenna, two ounces—of tincture of ſenna, two drams—of ſoluble tartar, one dram—of ſyrup of roſes, one dram. Make a potion, to be taken in the morning early.

After bleeding and purging, the following ointment is directed.

> Take of flour of brimſtone, one ounce—of the root of white hellebore powdered, or of crude ſal ammoniac in powder, two drams—of hog's lard, two ounces. Mix well together. A ſcruple or half a dram of eſſence of lemon may be added, to take off the diſagreeable ſmell.

Of this ointment one fourth part is to be rubbed over the body at bed-time; but as it may prove injurious, and productive of other diſorders, to ſtop too many pores at once, it is adviſed to rub only one fourth part of the body at once, with one fourth part of the above compoſition, and to proceed daily with the other three parts of the body and ointment. Some have been of opinion, that it is not neceſſary to apply this medicine to any other parts of the body, than the palms of the hands and the ſoles of the feet: but it is ſomewhat doubtful, how far this method of unction would be effectual to remove the diſorder; if it is equally efficacious, it is unqueſtionably the moſt agreeable method of applying the ointment, on account of the ſmell and uncleanlineſs which attends the univerſal uſe of it; but both theſe inconveniencies may be in a great meaſure leſſened by conſtant changes of clean and dry linen. That which is taken off ſhould be immediately waſhed, to prevent infection.

During the uſe of the ointment, the flowers of ſulphur ſhould be taken internally, either alone or with cream of tartar, in milk or new whey, in ſuch quantities as will keep the body gently open, producing a ſtool or two in the day.

Whilſt the patient is under this courſe of medicine, it will be neceſſary for him to keep himſelf rather warmer than uſual, and carefully to avoid taking cold; whatever

ever he eats or drinks ſhould be warmed, and he ſhould change no other part of his cloaths than his linen during the continuance of the diſorder.

Mercurial girdles, and mercurial ointments, were formerly much uſed in this diſeaſe, but both are attended with danger; and as the diſorder is effectually cured by the ſulphur without riſque, it is certainly to be preferred in all caſes, notwithſtanding the application of it may not be altogether ſo conſiſtent with nicety or delicacy.

And mercurial applications are the more to be avoided, on account of the poſſibility of miſtaking for the itch other eruptions on the ſkin, the ſtoppage of which may be attended with conſequences of a very fatal nature.

Therefore, though, for the ſatisfaction of thoſe who have particular objections to the ſulphur, we have ſubjoined preſcriptions for a mercurial lotion and ointment; yet we earneſtly adviſe our readers to avoid the uſe of them, unleſs they are adminiſtered under the directions of ſkilful practitioners of phyſic; to depend for a cure on the ſafe, eaſy, and certain remedies, which we have pointed out, and rather to ſubmit to a trifling, temporary, inconvenience, than run the hazards which may be incurred by an injudicious and unneceſſary uſe of mercurial medicines.

Take of white corroſive mercury, one dram —of common alum, two drams—of ſal prunella, half an ounce—of ſimple lime-water, half a pint. Mix to a lotion.

Take of white corroſive mercury, ten grains —of white precipitate of mercury, one dram —of ſoft pomatum, one ounce and half. Mix well to an ointment.

We cannot conclude this chapter without a caution to our readers, not only againſt the uſe of the laſt mentioned preſcriptions, but even of the ſulphur ointment, on every ſlight occaſion of eruptions on the ſkin, which are very often, and eſpecially in children, efforts of nature to relieve the habit from ſome approaching diſorder, and ſhould rather be encouraged than repelled; in all caſes it is ſafe to let the diſorder proceed till the nature of it can be aſcertained with preciſion. The itch is ſeldom or ever dangerous, and no worſe conſequences than the delay will ariſe from waiting a few days before external applications are made.

As want of cleanlineſs is the principal, if not the only cauſe of this diſorder; thoſe who have the care of children at public ſchools, and of adults in workhouſes, hoſpitals, and other public or charitable inſtitutions, ſhould be peculiarly attentive to this article: owing to neglect in this particular, it is no uncommon caſe for the itch to ſpread through whole ſchools; and as the promulgation of the circumſtance would bring diſcredit on ſuch ſeminaries, the diſeaſe is attempted to be ſtopped by mercurials and other injudicious applications, and by theſe means many tender conſtitutions are ruined, and foundations laid for diſorders, which ſhew themſelves at different times, and in various forms, in the future progreſs of life.

CHAP. XII.

Of Nervous Diſeaſes.

THE ſymptoms attending *nervous complaints* are ſo extremely numerous and various, as to reſemble at times almoſt every diſorder to which the human frame is liable; nor do the ſame ſymptoms indicate ſimilar complaints in different conſtitutions, or in the ſame conſtitutions at different times.

Thoſe who labour under internal diſorders, or have been accuſtomed to lead ſedentary lives; thoſe who are engaged in ſtudious or literary purſuits; and thoſe who have been ſubject to viciſſitudes of fortune, and whoſe ſpirits have been much oppreſſed or agitated, are peculiarly ſubject to nervous complaints.

The cauſes may be a natural, weak, and irritable diſpoſition of the nervous ſyſtem: whatever tends to weaken and debilitate the body, ſuch as indolence, exceſſes of all kinds, violent evacuations, indigeſtion, repletion, or too great abſtinence; unwholeſome food; weak, windy, and watery liquors; ſweats occaſioned by exceſſive labour, or violent exerciſe; large draughts of cold fluids taken under ſuch circumſtances; ſudden changes of climate; and expoſure to a cold, damp, or moiſt air.

But the operations of the mind are alſo in a very conſiderable degree contributory, if not to the creation, at leaſt to the increaſe of the ſymptoms which attend theſe diſeaſes; and, as we have before obſerved, the ſtudious, and thoſe who are engaged in ſuch employments as require intenſe thought, and perpetual uſe of the mental faculties, are very apt to feel that depreſſion or deprivation of ſpirits, which too often denotes the approach of nervous indiſpoſition; and which is alſo augmented by the inactivity of body, and conſequent indigeſtion, which a life of ſtudy naturally impoſes.

Nor do theſe diſorders unfrequently ariſe from the violence of the paſſions, either manifeſted in ſudden burſts of grief, ebullitions of anger, or in the ſlow progreſſions of concealed ſorrow or ſmothered reſentment. Yet ought we not in all caſes to conſider the peeviſhneſs and apparent ill humour which is generally obſervable in thoſe who are afflicted with nervous complaints, as the cauſes of theſe diſorders; they are as often the conſequences of them: for when the nerves are affected, the ſpirits ſuffer by ſympathy, and bodily indiſpoſition brings on thoſe changes of temper, and that wayward and diſſatisfied turn of mind, which are in theſe caſes to be conſidered as mere ſymptoms of the diſeaſe.

Scarce any part of the human body is without nerves, and very few of the nerves are without feeling; the nerves therefore muſt not only ſuffer when they themſelves, or the brain or ſpinal marrow from whence they all proceed, are primarily affected, but when any of the other parts of the body, through which they ſpread univerſally, are diſeaſed; and from hence ariſes the extreme difficulty of fixing a certain criterion by which nervous diſorders may in all caſes be diſtinguiſhed from thoſe which are not held to be of this claſs, though in ſome inſtances this may be done with tolerable certainty.

Ingenious phyſicians have aſſerted, that fevers make up two third parts of all the diſeaſes to which mankind are liable, and nervous diſorders one half of the remainder; the different denominations of theſe diſorders ariſe from the different degrees of them, which are manifeſted in an infinite variety of different ſymptoms and appearances, from yawning to madneſs.

The ſymptoms, then, will be according to the occaſional cauſe, and the part on which the influence of that cauſe is exerted; and among a ſtill greater number, the following preſent themſelves.

Heartburn, wind in the ſtomach and bowels, ſour eructations, ſqueamiſhneſs, nauſea; thoſe ejections of water from the ſtomach which are uſually called water-pangs; loſs of appetite and indigeſtion, or an uncommon craving for food, with a digeſtion unuſually quick, faintneſs, debility, hunger, with an uneaſy ſenſe of emptineſs, and a deſire after particular and very often improper food; cramps and ſharp pains in the ſtomach, oppreſſion of the breaſt, anxiety, timidity, and low ſpirits; ſpaſms in the bowels, and violent pulſations in the belly; gripings, colic pains, and windy rumblings, in the bowels; the belly ſometimes too lax, but much more frequently coſtive; pains in the back and belly, reſembling the gravel; an irritation and heat in the neck of the urinary paſſage; a frequent inclination to make water, the diſcharges of which are ſometimes in ſmall quantities, and at others very copious, and perfectly limpid or clear; a difficulty of breathing in ſome caſes, and in others a plentiful expectoration of thin and frothy ſpittle; alternate fluſhes of heat over the whole body, and general ſhiverings; a ſenſe of cold, as if water was poured over certain parts of the body, and this ſucceeded by an univerſal glow; flying pains in the limbs, back, and between the ſhoulders; cramps or convulſive motions of the muſcles; ſudden twitchings or ſtartings of the legs or arms; involuntary motions of the muſcles of the head, neck, or limbs; general convulſions affecting the ſtomach, bowels, throat, limbs, and almoſt the whole body, the patient ſtruggling as in a fit of epilepſy; faintings which continue long, and in ſome inſtances ſucceed each other at very ſhort intervals; violent palpitations of the heart, a variable pulſe, a dry cough and conſtrictions of the lungs, which ſometimes return periodically; hiccups, yawning, deep ſighs; a ſenſe of ſuffocation, as if from a ſwelling or lump in the throat; involuntary flowing of tears, and fits of laughter without cauſe: if the patient is cool by day, and his pulſe moderate and regular, yet at night hot fluſhes ſpread over the whole body, the pulſe grows more quick and ſtrong, and he awakes with a kind of faint ſickneſs. To theſe ſymptoms may be added, a giddineſs, which is particularly felt on any ſudden motion; violent pains in the head, which have frequent periodical returns; fixed, acute, and piercing pains, in particular parts of the head, generally about the crown; noiſes in the ears, and dimneſs of ſight, or miſtineſs before the eyes, which are alſo affected with dryneſs and ſharp pains; objects ſeen double, offenſive ſmells in the noſtrils, obſtinate watchings, accompanied with uneaſy ſenſations, which the patient himſelf can neither deſcribe or account for, but which wear off on getting out of bed; diſturbed and interrupted ſleep; horrid dreams; night-mare; conſtant drowſineſs; fear, peeviſhneſs, ſadneſs, and ſometimes deſpair; at others, the ſpirits too active and gay, producing wandering thoughts and idle imaginations; loſs of memory, apprehenſions of death from diſeaſes which are not preſent, and ſuggeſtions of danger which exiſt only in the ideas of the weakened and impaired faculties.

After the patient has been long affected with ſome of theſe ſymptoms, (for it is not to be ſuppoſed they ſhould all attend the ſame perſon) he ſometimes becomes melancholy or mad, or falls into a dropſy, black jaundice, the pulmonary conſumption, palſy, epilepſy, apoplexy, or ſome other fatal diſeaſe.

Thoſe who are liable to the above ſymptoms may be divided into different claſſes: ſuch as, notwithſtanding they continue in general good health, are yet, from an extraordinary irritability of the nerves, apt to be affected with tremors, palpitations, faintings, or convulſions, on any ſudden impulſe of the paſſions, or from any thing which affects diſagreeably the moſt ſenſible parts of the body; thoſe may be ſaid to be diſpoſed to nervous diſorders, or to have what is uſually termed a *nervous habit*.

Thoſe who, added to the ſymptoms laſt mentioned, are troubled with indigeſtions, flatulencies, and indiſpoſition of the ſtomach and bowels, are ſaid to be *hyſteric*.

Thoſe whoſe paſſions are leſs apt to be diſturbed, and who are therefore leſs affected by palpitations of the heart, faintings, and the like, but yet are ſubject to indigeſtion, want of appetite or extraordinary craving for food, belchings, coſtiveneſs, oppreſſion of the breaſt, low ſpirits, wandering and unpleaſing thoughts, interrupted ſleep, and ſymptoms of the ſame kind, are ranked as *hypochondriac*.

The fourth claſs are compoſed of ſuch as labour under any of the foregoing complaints accompanied with a fever, or when a fever produces ſeveral of thoſe ſymptoms; in which caſes the diſorder is called a *nervous fever*. Of this diſeaſe we have already treated.

Thoſe who are *generally nervous*, the *hyſteric*, and the *hypochondriac*, are therefore the ſubjects to whom this chapter is particularly addreſſed; and it is neceſſary to caution all thoſe who labour under chronic nervous complaints, againſt an idea which may in ſome meaſure be conſidered as one of the ſymptoms of the diſeaſe: thoſe who are thus afflicted are too apt to expect a cure from every remedy but that which is immediately applied, and thus wandering from phyſician to phyſician, and from preſcription to preſcription, and catching at diſtant hopes of relief, they give no one medicine fair play, nor continue the uſe of it long enough to afford a poſſible chance of ſucceſs; and to this, much more than the inſufficiency of the preſcriptions, it is owing, that men complain of having ſwallowed loads of phyſic, the only effect of which hath been the aggravation of all the ſymptoms; whilſt, if they had been content to purſue one certain courſe of medicine properly adviſed, they might probably have received all the benefit which the nature of the caſe would admit; and this is for the moſt part little more than temporary relief; nervous diſorders of the chronic kind are ſeldom radically cured; the irritability of the nerves, and the diſpoſition to be affected by very ſlight cauſes, remaining after all the efforts of medicine, relapſes are ſo conſtantly to be expected, that the immediate removal of all the apparent ſymptoms can hardly ever be conſidered as a reſtoration to health.

But to give a little light to this melancholy proſpect, it may be remembered, that however troubleſome nervous complaints may be, they are ſeldom attended with any conſiderable degree of danger, unleſs they are left too long unnoticed; in which caſe, as well as from improper treatment, they are apt to degenerate into ſome of thoſe fatal diſorders which we have already mentioned; and nervous patients may alſo find ſome conſolation from being aſſured, that they are not very liable to diſorders of the inflammatory kind, or hardly ever ſuffer ſeverely from the conſequences of them.

In all chronic diſeaſes, regimen is of great importance; and food, liquors, air, and exerciſe, ought to be the firſt immediate objects of our attention, in our endeavours either to palliate or remove.

Many of the nervous ſymptoms proceed apparently from indigeſtion; light animal food, therefore, the juices of which have not been exhauſted by over dreſſing, or vitiated by rich ſauces and ſpices, with a proper mixture of raw ſallads and ſuch boiled vegetables as are warm and grateful to the ſtomach, and not apt to turn ſour on it or to produce flatulencies, will be proper: we mention *boiled* vegetables, because the pernicious exotic cuſtom of ſtewing them in high and rich gravies, deſtroys every wholeſome quality, and renders them the vehicles of a ſlow but certain poiſon.

The liquors may be water with a toaſt, or in which toaſted bread hath been boiled, either with or without a mixture of wine; or if wine and water diſagrees or produces windy complaints, a table-ſpoonful of brandy in a pint of water may ſit better on the ſtomach.

A glaſs or two of good wine after meals, where the patient has been accuſtomed to it, may be taken without injury; but perhaps this cordial may be uſed to more advantage, drank between the meals, eating at the ſame time a cruſt of bread or a biſcuit whenever the patient feels himſelf empty and faint.

All hot liquors are prejudicial, punch and drams abominably hurtful: if biſcuit and fruit can be ſubſtituted inſtead of tea and coffee for breakfaſt, the patient will by degrees find the benefit of the change; where this cannot be complied with, milk chocolate, milk broth, or whey, with bread and butter, will be a more wholeſome morning meal.

Whoever wiſhes to get rid of nervous complaints, will do well to avoid fleſh ſuppers; but thoſe who are ſo habituated to the uſe of them as to find a difficulty in abſtaining from this indulgence, ſhould ſup early enough to uſe exerciſe after, and eat nothing heavier than chicken, rabbit, fiſh, or the like: for ſuch as muſt have ſuppers, ſhell-fiſh will prove leaſt offenſive.

Thoſe who labour under nervous diſorders, ſhould eat ſparingly but frequently; never overloading the ſtomach, or ſuffering it to remain long empty; ſmall quantities of food at a time are eaſily digeſted, and a conſtant ſupply of it prevents faintings, wind, and eructations.

Air, which is heated either by the ſun or fire, relaxes and conſequently injures the nervous patient; that which is damp or moiſt is equally prejudicial; a cool and dry air therefore is to be choſen, but where the body is conſiderably weakened, and particularly where the internal parts of it are principally affected, it will be neceſſary to guard againſt cold by additional garments, and thoſe of the woollen kind next or near the ſkin. Nothing contributes more to the relief of nervous complaints, than a due temperature of air; an extraordinary degree of heat enervates and heightens that languor, faintneſs, and depreſſion of ſpirits, which are the conſtant companions of thoſe who are afflicted with theſe diſorders; and cold is apt to affect the breaſt, ſtomach, and bowels, and aggravate all the ſymptoms by which thoſe tender parts are affected.

The beſt deviſed preſcriptions of medicine will have little effect, unleſs the uſe of them is accompanied with exerciſe, the kind and degree of which muſt be ſuited to the patient's ſituation, ſtrength of body, the nature and violence of the ſymptoms, and other circumſtances; thoſe who are exceedingly reduced, muſt begin with frictions, by a flannel, coarſe cloth, or fleſh bruſh, which not only excite a gentle and ſalutary perſpiration, but promote the circulation; to thoſe whoſe ſtrength is leſs impaired, riding on horſeback will be attended with the beſt conſequences; but whether taken in this way, in a carriage, or by walking, it is eſſentially neceſſary, and not to be diſpenſed with.

Voyages and travelling have both been recommended; the ſea itſelf, and the effect this kind of motion produces on the body, is very often ſerviceable, as well as the regular and progreſſive exerciſe of long journies; but the benefit derived from either is probably augmented by the change of ſituation and the variety of objects preſented, which affording the faculties conſtant employment, and not engaging them too deeply, keep the mind in a ſtate of continual amuſement, without permitting that intenſeneſs of thought, which is apt to prey upon the ſpirits, and irritate the nerves.

To prevent theſe effects, it is in all caſes neceſſary to keep the mind in as calm a ſtate as the nature of human exigencies will permit; ſudden impreſſions of fear or anger operate on the nerves like an earthquake on the terreſtrial globe, agitating, convulſing, and in a manner overturning the whole ſyſtem; and grief, anxiety, and reſentment, unſtring and unbrace them by degrees, and with a leſs violent, though equally certain effect, render them incapable of performing the natural functions of life.

It therefore behoves thoſe who are attendant on the nervous patient, to conceal from him as much as poſſible all unpropitious events in his affairs, and other cauſes of affliction; to bear with the frequent changes of his temper, and the unſatisfied and wayward diſpoſition of his mind, as accidental effects of diſeaſe; to humour, and, as far as poſſible, to comply with his whims and expectations; and to contribute to his amuſement, by diverſions, lively converſations, and innocent mirth.

From the variety of ſymptoms which we have recounted as attendant on nervous diſorders, it will appear that medicine muſt be adapted to each particular caſe; that ſome of theſe caſes have been already deſcribed and preſcribed for, and that others will be treated of under the heads of thoſe diſeaſes, whoſe appearances they repreſent, and into which they are moſt diſpoſed to degenerate: it remains for us at preſent to point out ſome remedies which may be generally uſeful, and others which apply to ſuch peculiar circumſtances as are not ſufficiently provided for in other parts of this work, and where the ſymptoms are manifeſtly nervous.

The body ſhould always be kept open by gentle purgatives; tinctures of rhubarb and ſenna generally anſwer this purpoſe, and are much to be preferred to ſtronger or more active purges.

The bark is almoſt an univerſal remedy; it may be taken in ſubſtance, or a tincture of the following compoſition.

Take of Peruvian bark in powder, one ounce —gentian root, and the rind of Sevill orange, of each half an ounce—coriander ſeeds, and the leſſer cardamom ſeeds, of each two drams. Let all theſe ingredients be well bruiſed and mixed in a mortar; and infuſed a week in a quart of French brandy, ſhaking it frequently: at the end of that time, pour or ſtrain it off fine; and let the patient take a table-ſpoonful, either in a glaſs of wine and water, or water alone, half an hour before each meal.

If indigeſtion, vomiting, and pains in the ſtomach, are occaſioned by too great ſenſibility of that part, from twenty to thirty drops of laudanum may be added to that doſe of the laſt mentioned infuſion, which is to be taken before dinner; but as theſe complaints frequently happen from faults in the ſtomach, gentle emetics, magneſia and elixir of vitriol, ought to be tried before the opiates are adminiſtered, which in moſt nervous caſes that are not ſpaſmodic, ſhould be very cautiouſly preſcribed, being apt rather to increaſe the ſymptoms in future, though they may procure preſent relief.

In caſes of convulſive motions, or fixed ſpaſms in particular parts of the body, a mild opiate is recommended to be taken a ſhort time before the expected return of the fit; but where the ſymptoms are violent, bleeding is firſt neceſſary, and then the opiate may be given in larger doſes: in different degrees and caſes, camphire, caſtor, muſk, aſafœtida, æther, or volatile alkaline ſpirits, may afford relief; to which may be added general or partial warm baths, fomentations of the part affected, and where the ſpaſms are of the inteſtines, emollient clyſters. The effects of ſudden fear or ſurprize have in ſome inſtances been favourable, and ſometimes ſpaſms are removed in one part by applications which produce pain in others; ſuch as bliſters, acrid plaſters, and ſuch frictions as may occaſion a temporary inflammation: relief may in ſome inſtances be obtained by applying tight bandages to the particular part affected.

If the convulſions are attended by fainting fits, the pulſe ſhould be conſulted, and bleeding be either practiſed or omitted, according as it is found more or leſs ſtrong: acid ſpirits may be held to the noſe, hot bricks or bladders of hot water applied to the ſoles of the feet; the legs, arms, and feet, ſhould be alſo ſtrongly rubbed, or if it can be eaſily effected, the lower extremities may be placed in water at leaſt blood warm; as ſoon as the patient can ſwallow, a glaſs of water with a table-ſpoonful of vinegar may be given, unleſs he is of a relaxed and enfeebled habit, in which caſe a gentle cordial may be more proper.

When a violent pain in the ſtomach is accompanied with cramps, bleeding may be of uſe, but not unleſs the patient is of a ſtrong or robuſt conſtitution; in other caſes, if there is a tendency to vomit, the ſtomach may be firſt waſhed out with a moderate quantity of camomile or carduus tea, after which a clyſter of common compoſition, with the addition of forty, fifty, or ſixty drops of liquid laudanum, may be adminiſtered, and repeated if the cramps return: muſk may alſo be given, in doſes from four grains to ten, with any cordial liquid, and the ſtomach may be rubbed with the anodyne balſam.

If the nervous ſymptoms appear in a windy or hyſteric colic, and a coſtiveneſs, give a laxative clyſter, adding from one dram to two of aſafœtida; but when theſe complaints are alſo attended by vomitings, theſe diſcharges may at firſt be promoted by a few draughts of the water in which toaſted bread hath been boiled, and as ſoon as this liquid will remain on the ſtomach, add a fourth part of peppermint water, and from five to ten drops of liquid laudanum; clyſters with liquid laudanum may alſo be given, and ſaline mixtures ſwallowed in the act of fermentation: if theſe remedies fail to remove the complaints, pills of calomel and aloes are recommended to procure a paſſage, ſtill continuing the uſe of the opiate clyſters.

Palpitations of the heart will require nearly the ſame treatment and medicines as other convulſive or ſpaſmodic ſymptoms; but if ſuppreſſed evacuations are the cauſe, theſe complaints will be removed by reſtoring them: whatever diſturbs the ſpirits is apt to bring on this nervous ſymptom, which will generally abate when the patient's mind is brought back to a ſtate of calmneſs and compoſure.

Nothing contributes more to relieve lowneſs and oppreſſion of ſpirits than cold bathing, which ſhould be continued regularly through all the ſeaſons of the year, except in extreme winter; perſons of corpulent, fleſhy, and florid habits, may bathe daily, but twice or thrice a week will be ſufficient for thoſe who are ſpare and thin: if this courſe appears to weaken the patient, or he is chilled, faint, or ſick, for any conſiderable time after bathing, it ſhould be omitted; nor is it by any means to be practiſed when the internal parts of the body are particularly affected.

Beſides the medicines which we have already mentioned as general remedies, there are others which may be offered as ſerviceable, under particular circumſtances, to leſſen and remove the irritability of the nerves.

Of theſe the following may be taken, as well to ſtrengthen the ſtomach, and indeed the whole conſtitution, as to leſſen, at leaſt for a time, the too great ſenſibility of the general nervous ſyſtem.

Take gentian root ſliced, the tops of the leſſer centaury, and the yellow rinds of Seville oranges, of each half an ounce. Infuſe theſe ingredients ſix days in a quart of Madeira wine. Give two, three, or four table-ſpoonfuls twice a day, in the morning and afternoon.

But if acids prevail in the ſtomach, and a particular coldneſs is felt there, a quart of boiling water may be poured over the ſame ingredients, ſtrained off when it is cold, and taken with a mixture of French brandy, to the amount of one part in four; and if either of theſe infuſions ſhould prove heating, this effect may be prevented by the addition of a ſmall quantity of elixir of vitriol to each doſe. If bitters ſhould be heavy on the ſtomach, or injure the appetite, which ſometimes happens, they ſhould by all means be omitted; and inſtead of theſe medicines, from twenty to thirty drops of the elixir of vitriol may be taken at the ſame time, in a glaſs of water, or brandy and water, according to circumſtances: when this preparation agrees with the ſtomach, it is an excellent ſtrengthener, aſſiſts an impaired appetite, helps digeſtion, and allays windy complaints; and if heat in the ſtomach occaſions a foul tongue, and a degree of thirſt, both theſe ſymptoms will receive relief from this medicine.

Simple filings of iron, in doſes of ten or fifteen grains, taken twice or thrice a day, ſometimes ſucceed in theſe complaints; but if the filings are offenſive to the ſtomach, from ten to fifteen drops of the tincture of the flowers of iron may be taken, inſtead of the ſubſtance, in a glaſs of of wine and water.

Though we have enumerated a variety of medicines, yet the patient muſt not flatter himſelf with the hope of obtaining a perfect cure by the uſe of all or any of them; the utmoſt he can expect is a ſuſpenſion of the ſymptoms, which will return whenever he remits in the articles of regimen, whenever he indulges in exceſſes of eating or drinking, omits to uſe conſtant and moderate exerciſe, or ſuffers his paſſions to betray him into violence, or ſink him into deſpondency; regularity of life, and equanimity of temper, are the only preſervatives againſt the attacks and relapſes of chronic nervous diſorders.

CHAP. XIII.

Of Palſies.

A *Palſy* is an abolition or diminution of ſenſe, voluntary motion, or feeling, or of all three: when the whole body below the head is affected, or the lower half of the body, it is called *paraplegia*; if one whole ſide, or one ſide of the head and face, are attacked, it is ſaid to be an *hemiplegia*; and when the diſorder is confined to a particular limb, it is denominated a *paralyſis*, or *particular palſy*.

When the muſcles of the face are paralytic, the ſource of the diſorder is in the brain; but if theſe are free, the nerves of the ſpine only are affected.

The degree of danger attending this diſeaſe, is determined by the importance of the part affected: when only a particular limb is the ſubject of it's attack, a cure, though not a ſpeedy one, may be expected; but when any of the internal and vital parts ſuffer, little hope can be entertained; and if the part remains cold and inſenſible, or ſhrinks and waſtes away, or the faculties appear to have ſuffered injury, the cure is difficult and doubtful, and in theſe caſes the diſorder frequently continues during life.

The palſy may proceed from ſuppreſſion

of accuſtomed evacuations; from a tranſlation of the diſeaſed matter of acute diſorders; from whatever compreſſes or contracts the nerves, and prevents the regular exertion of the nervous powers; from ſtrong ligatures, diſlocations, fractures, wounds of the brain or ſpinal marrow, or of the nerves themſelves; depreſſions of the ſkull, or other preſſure on the brain; or from tumors, either inflammatory or ſcirrhous, in the coats of the nerves: it may alſo be occaſioned by irregularity of living, drinking to exceſs, and particularly of ardent ſpirits; from exceſſive heat, extreme cold, drinking large quantities of hot and weak liquors, and from the poiſonous effluvia of metals and minerals.

Previous to the attack of this diſeaſe, a ſhivering or ſenſe of cold water running through the part is felt, then a numbneſs and a giddineſs of the head, which gradually terminates in a deprivation of ſenſe and motion in the part affected; when it ſeizes one ſide, the other is frequently racked with excruciating pains and convulſive motions; the mouth is diſtorted, the powers of ſpeech loſt, and as the diſorder advances, the memory fails, and all the faculties of the mind are impaired in proportion to the violence of the ſymptoms. A palſy which affects a particular limb, is ſometimes preceded by an unuſual weight in the part deſtined to ſuffer, and the motion of the whole body is ſlow, accompanied with paleneſs, and a kind of ſtupidity and numbneſs; the fleſh of the part itſelf is looſe, ſoft, or flabby to the touch, and cold; and after the ſeizure the limb ſometimes appears puffed up, and at others ſhrunk and ſhrivelled.

The regimen muſt be ſuited to the patient's age, habit of body, and conſtitution: when this diſorder attacks thoſe who are young, vigorous, and full of blood, a cooling diet will be neceſſary; but in old age, and when relaxation or weakneſs is the principal occaſion of the diſeaſe, the food ſhould be nouriſhing, and rendered warm and comfortable by ſpices and aromatics of the vegetable kind, ſuch as muſtard, horſeraddiſh, and the like; and the liquors, generous wines, wine or muſtard whey, negus with nutmeg and cinnamon, or brandy and water.

Exerciſe is to be taken at all times, and in all ways that may not expoſe the patient to damp, moiſt, or cold air; if his ſtrength will admit of a journey, it may be of uſe, and a voyage to a warmer climate is frequently attended with conſiderable advantage.

When the diſeaſe is apprehended to ariſe from a fullneſs of blood, occaſioned by an exceſs of vital heat, it may be neceſſary to bleed, and to repeat the operation till the heat is reduced to the ſtandard of health; and cooling medicines, baths of water very little warmed, and gentle purges, may be uſed; but this treatment is only proper in a recent caſe: where the diſorder hath been of long continuance, and the blood is impoveriſhed, theſe methods muſt not be attempted.

In that palſy which affects the aged, infirm, and weakly, who are indeed much more liable to this diſeaſe than the young, healthy, and vigorous, a very different courſe muſt be followed.

In the fit, bottles or bladders of warm water ſhould be applied to the feet; and if the breath ſeems to be ſtopped, and the motion of the lungs ceaſes, warm breath ſhould be breathed into them through the patient's mouth, and as ſoon as he can ſwallow, cordial medicines ſhould be adminiſtered.

When he is recovered from the immediate fit, endeavour to diſcover the particular cauſe of the diſorder, and proceed on that ground.

A ſtimulating clyſter ſhould be adminiſtered as ſpeedily as circumſtances will admit; this may be the common compoſition, with half an ounce of rock ſalt, or the like quantity of common ſalt.

A gentle emetic of ipecacuanha will alſo be uſeful; which may be worked off with a few draughts of carduus or camomile tea, or warm water in a quart of which half a tea-ſpoonful of the flour of muſtard hath been mixed.

Particular attention is to be paid to the application of bliſters: when laid over the nape of the neck or on the back, they are apt to occaſion convulſive twitchings; and though bliſters are uſeful in general palſies, yet they are ſtill more ſo when only particular limbs are affected; and in thoſe caſes the proper places of application are where the nerves of the reſpective parts originate; ſo when a palſy attacks the upper extremities, the bliſter ſhould be applied to the ſpine of the neck, and towards the ſhoulders; and when the diſorder is ſeated in the lower extremities, the ſacrum, or the very loweſt part of the back-bone, is the propereſt place for them.

After theſe evacuations, warm, nervous, and corroborant medicines are neceſſary; and any of the following forms may be adapted to particular caſes.

Take of horſe-radiſh root ſliced, two ounces—of white muſtard-ſeed bruiſed, three drams—of the root of wild valerian, half an ounce—of rhubarb bruiſed, three drams. Beat the whole well together in a mortar, and infuſe three or four days in a quart of French white wine, ſhaking it frequently. Strain it off, and give four table-ſpoonfuls twice or thrice a day.

Take of water, one ounce and half—of nutmeg water, two drams—caſtor powdered, and ſalt of hartſhorn, of each one ſcruple—of ſyrup of oranges, one dram. Make a draught, to be taken every ſixth hour, or oftener, as circumſtances may direct.

Take milk of gum ammoniac, and ſimple cinnamon water, of each three ounces—of the volatile fœtid ſpirit, three drams—of ſyrup of ſaffron, half an ounce. Mix, and take three table-ſpoonfuls twice or thrice a day.

Take compound ſpirit of lavender, tincture of ſoot, and the volatile fœtid ſpirit, of each three drams. Mix, and take forty drops frequently in any proper liquid.

Take ſpirits of ſal volatile, compound ſpirits of lavender, and tincture of caſtor, of each two drams. Mix, and take forty drops in a glaſs of white wine two or three times a day.

The Bath waters, uſed both internally and externally, are of ſingular uſe; and where circumſtances do not admit of their being applied, baths of rain, or other light water, in which aromatic ingredients have been boiled or infuſed, may be ſubſtituted.

When the palſy hath been occaſioned by mineral fumes or exhalations, the cure is extremely difficult; *lead*, in particular, deſtroys the ſenſation: ſo that when this diſeaſe ariſes from that cauſe alone, purging medicines are required to be given in doſes very much exceeding the uſual quantities.

Relief may be obtained in a palſy of the belly by a fomentation of hot wine, in which ſpices and other aromatics have been boiled; and a little of the ſame preparation may be taken internally, if the pulſe does not indicate any degree of fever.

Of external applications, the ſaponaceous liniment is perhaps equal to any other in efficacy, though the following hath been recommended.

Take of Barbadoes tar, one ounce—of camphorated ſpirits of wine, four ounces—of ſpirit of turpentine, half an ounce. Make an embrocation, and anoint the part affected with the palſy, and the ſpine of the back, night and morning.

But *electricity* ſeems to be preferable to every other external remedy; the ſhock ſhould be received near the origin of the nerves which extend to the diſeaſed part, and the violence of it, as well as the repetitions, muſt be proportioned to the age and ſtrength of the patient, and the circumſtances which attend the diſorder.

Rubbing the part with a warm hand, a fleſh-bruſh, or dry flannels, ſhould not be omitted; and if by theſe means a perſpiration is excited, warm flannels ſhould be immediately applied, and conſtantly worn.

A great variety of ſimple remedies are preſcribed for the cure of this diſeaſe, ſome of which may be found to merit regard.

Take white and red ſage, of each a handful. Boil a few minutes in a quart of ſtrong white wine: ſtrain it when cold, and bottle it. Let the patient take a ſmall wine-glaſsful morning and evening.

Take cæphalic ſnuff, or any other compoſition of the like kind which will provoke ſneezing, mornings and evenings.

Take a table-ſpoonful of white muſtard-ſeed every morning in a glaſs of white wine.

Mix flour of muſtard with warm water, and as ſoon as the pungency of the mixture affects the noſtrils, rub the diſeaſed part with it before a fire.

Shred white onions, and bake them ſlowly in an earthen veſſel till they are quite ſoft; ſpread a plaſter thick with this poultice, and apply it ſo as to cover the whole part affected.

Take half a dram of the powder of wild valerian root in a glaſs of white wine three times a day: or, infuſe half an ounce of the powder, and half an ounce of ſage leaves, in a pint of white wine, and take two or three table-ſpoonfuls three times a day.

CHAP. XIV.

Of the Apoplexy.

THE *apoplexy* is a ſudden and univerſal privation of all ſenſe and voluntary motion; wherein, though the patient is to all appearance dead, yet the pulſe continues to beat, and the heart and lungs to move, though the breathing is difficult and oppreſſed.

Perſons advanced in age, thoſe who are indolent, or who indulge in exceſſes of eating and drinking; thoſe of groſs or ſanguine habits, and whoſe necks are ſhort; are moſt liable to this diſeaſe.

There are two different ſpecies of apoplexies, and the diſtinctions demand our utmoſt attention, as the method of cure in each is totally different.

The firſt is the *ſanguineous apoplexy*, and the ſecond is called the *ſerous apoplexy*.

The cauſe of both is a compreſſion of the brain; in the former caſe by a ſudden and violent effuſion of blood, and in the latter by a collection of ſome watery fluid: and both may be occaſioned by whatever throws too large a proportion of blood on the brain, or prevents it's return from the head—ſuch as violent paſſions; hard drinking, eſpecially of ſpirituous liquors; exceſſive labour or exerciſe; intenſe ſtudy, or fixed attention on any particular object; high living; ſuppreſſion of any evacuations, either uſual or extraordinary; repulſion of eruptions on the ſkin; expoſure to intenſe heat or extreme cold; ſudden changes from the one to the other; tight ligatures round the neck; poiſonous fumes of metals or minerals; or external injuries, ſuch as blows, wounds, or bruiſes on the head.

The uſual forerunners of theſe ſeizures, are acute pains in the head, giddineſs, dimneſs of ſight, loſs of memory, heavineſs, noiſes in the ears, an involuntary flow of tears, difficulty of breathing, the night-mare, a grinding of the teeth during ſleep, a coldneſs of the whole body, and eſpecially of the extremities. Thoſe who have already been ſubject to thoſe diſeaſes ſhould carefully attend to theſe preceding ſymptoms; and, according to the habit of body, prepare againſt the attack by bleeding, opening medicines, and a low diet.

On the approach of the fit, the patient ſometimes falls down at once, as if he had received a muſquet-ball in his heart; at others his fall is accompanied with violent ſhrieks, and immediately his eyes cloſe, and ſenſe and voluntary motion are totally ſuſpended.

The ſymptoms of a *ſanguineous apoplexy*, are a full and ſtrong pulſe; a fluſhed and bloated countenance; breathing ſo difficult as even to endanger ſuffocation, and accompanied with a ſnorting noiſe; the patient's breaſt ceaſes to heave, and ſeems conſtricted as if it was bound by cords; his neck appears ſwelled, and the veſſels there and about the temples ſeem full and diſtended; the eyes are either cloſed or fixed, gloſſy, and prominent; the excrement and urine in ſome inſtances paſs away involuntarily; and the ſtomach diſcharges it's contents by vomiting.

The danger ſeems to be in a great meaſure proportioned to the difficulty of breathing and ſwallowing: if the patient reſpires eaſily, and can get down liquids, we may have good hopes of recovery; but if the reſpiration is extremely difficult, and ſometimes intermits, or if what the patient attempts to drink is returned immediately through the noſe, very fatal conſequences may be apprehended.

In the ſanguine ſpecies of apoplexy our firſt care muſt be to give the patient air and eaſe in his cloaths; for this purpoſe his head ſhould be lifted up, and he ſhould be placed in a ſitting poſture, and as nearly erect as poſſible; whatever is tied round the neck, as well as his wriſts, ſhould be looſened, though his garters may be tied tight, which may prevent the too quick return of the blood from the lower extremities; and every part of his garments ſhould be examined, and all ſtrictures and compreſſions ſhould be removed from the head, neck, breaſt, ſtomach, and belly: the patient ſhould be brought near a window, or placed in the open air.

As ſoon as it can conveniently be done, a conſiderable quantity of blood ſhould be taken from the arm or jugular veins; and this operation may be repeated again at the diſtance of an hour or two, ſooner or later, as occaſion may require: ſome recommend opening the temporal artery during the fit.

A lenient clyſter with oil, and a table-ſpoonful of common ſalt, ſhould be given as ſpeedily as poſſible, and repeated every hour or two, till the patient is capable of taking medicines by the mouth. Inſtead of theſe clyſters, ſome adviſe the following.

Take of the common clyſter decoction, twelve ounces—emetic wine, and ſyrup of buckthorn, of each one ounce. Make a clyſter.

Or, take the leaves of rue, tobacco, or pennyroyal, of each a handful—of *coloquintida*, or bitter apple, two drams. Boil the whole half an hour in as much water as will at the end of that time be reduced to ten or twelve ounces.

As ſoon as the patient is ſo far recovered as to be able to ſwallow, he may drink freely of whey, made either of cream of tartar or muſtard, or the opening decoction of tamarinds and liquorice; emetics are extremely dangerous in this ſpecies of apoplexy, and all ſpirituous liquors, and volatile ſpirits and eſſences, ſhould be avoided, as they generally tend to accelerate the motion of the blood towards the head.

A cooling purge may alſo be immediately given, which may be of Glauber's ſalts with the addition of nitre, manna diſſolved in an infuſion of ſenna, or the like; and laxative medicines ſhould be repeated occaſionally, to keep the body open.

A ſpoonful or two of common ſalt, diſſolved in half a pint of water, and poured down the patient's throat as ſoon as poſſible, even during the fit, is ſaid to contribute to the ſpeedy removal of it; and this may be tried, as no poſſible inconvenience can ariſe from the attempt, even if it ſhould fail.

If the patient remains long in the fit, or continues in a torpid or inſenſible ſtate after the removal of the more violent ſymptoms, it will be neceſſary to apply bliſters to the head, back, legs, thighs, and even all over the feet; though ſome prefer ſinapiſms or warm poultices to theſe extremities.

The ſymptoms of the *ſerous apoplexy* are nearly the ſame as thoſe of the ſanguineous, only that the pulſe is leſs ſtrong, the countenance pale, or at leaſt not ſo violently fluſhed, and the difficulty of breathing leſs oppreſſive.

In this kind of apoplexy the ſame cautions are neceſſary with regard to raiſing the patient's head, his poſture, and looſening his dreſs: likewiſe attempts to get down the ſolution of ſalt and water may be very properly made; and perhaps taking away a ſmall quantity of blood, without repeating the operation, may rather be attended with advantage; though this evacuation is not ſo neceſſary in the ſerous as in the ſanguineous apoplexy, and ſhould never be made if the pulſe is remarkably ſmall, fluttering, or intermittent.

Clyſters, as above directed, may alſo be adminiſtered and repeated; and purges of *tinctura ſacra*, or the ſacred tincture, ſhould be taken as ſoon as the patient can ſwallow, and continued every third or fourth day.

In this caſe alſo it will be ſerviceable to bliſter between the ſhoulders, and on the fleſhy parts of the legs, and the feet ſhould be conſtantly wrapped in flannels.

In full habits muſtard-ſeed and horſe-radiſh, are very efficacious remedies; the former ſhould be ſwallowed whole, to the amount of two or three table-ſpoonfuls in a day in different doſes, and the latter may be freely eaten with the patient's food, or an infuſion or decoction of it may be taken occaſionally.

Volatile ſpirits and valerian are alſo recommended, and may be taken in the following forms.

Take of the milk of gum ammoniac, one ounce—of ſpirituous pennyroyal water, two drams—volatile fœtid ſpirit, and balſamic ſyrup, of each one dram. Make a draught, to be taken every ſixth hour.

Or, take of caſtor, half a ſcruple—of the powdered root of *arum*, or cuckow-pint, (which is alſo ſometimes called wake-robin) one ſcruple—of ſyrup of ſaffron, enough to make a bolus. To be taken twice or three times a day with three ſpoonfuls of the following julep.

Take of ſimple pennyroyal water, ſix ounces—volatile tincture of valerian, and fœtid volatile ſpirit, of each three drams—of ſyrup of ſaffron, two drams.

The diet of thoſe who are afflicted with the ſanguineous apoplexy, ſhould be thin, cooling, and low: thoſe who ſuffer by attacks of the ſerous kind, ſhould take light but nouriſhing food; and in both caſes the mind ſhould, if poſſible, be kept undiſturbed, as agitation of ſpirits is very apt to occaſion returns of the fits.

Thoſe who have once been attacked by an apoplectic fit of either kind, are extremely liable to relapſes, in which caſe each ſucceeding ſeizure is more violent and more dangerous than the former: to prevent theſe returns, great attention will be neceſſary to avoid whatever may occaſion them; and to this end it will be neceſſary for ſuch perſons, and indeed for all who are of full and ſanguine habits, with ſhort necks and very ruddy or florid countenances, to abſtain from fleſh ſuppers, and from ſleeping with their ſtomachs full of any kind of food; to ſhun hot rooms, and to refrain from violent bodily exertions, and particularly from walking, riding, running, or other motion, under an expoſure to the ſummer's ſun; to guard againſt cold, eſpecially in the feet; to go early to bed, and riſe betimes; and to reſiſt the impulſes of anger, or other violent paſſions.

It will alſo be adviſeable for thoſe of apoplectic makes and habits, to take regular but gentle exerciſe, ſo as to excite moderate perſpiration without producing fatigue; to keep the body open; and perhaps it may not be improper to loſe a little blood once or twice a year, either in the ſpring and fall, or previous to thoſe ſeaſons in which they have been ſubject to preceding attacks; and, if to theſe precautions are added, a continued drain, either by bliſter or ſeton, and a regard to poſtures and ſtrictures, which ſhould always remind them never to ſtoop much, to lie with their heads low in their beds, or to wear any thing tight about their necks, great hopes may be formed of eſcaping from the future viſitation of this diſagreeable and dangerous diſeaſe.

CHAP. XV.

Of the Epilepſy, or Falling Sickneſs.

AN *epilepſy* is an involuntary and violent convulſive contraction of the nerves, membranes, and muſcles of the whole body, attended with a total deprivation of ſenſe.

Weakly children, and thoſe who are treated too tenderly, and are too much indulged, are moſt liable to it; and men are in general more ſubject to it than women.

Epilepſies are ſaid to be in ſome inſtances hereditary, or may more probably be occaſioned by frights and alarms of the mother during pregnancy: they may alſo proceed from flatulencies in the ſtomach or bowels; from ſpaſms of the inteſtines; from intenſe application to ſtudy, or to the exerciſe of any of the finer arts; from leading a ſedentary life; from the acrid matter of eruptive or other diſeaſes tranſlated to the brain; from the ſuppreſſion of accuſtomed evacuations; from the ſtoppage of old ulcers or ſores, or of iſſues, ſetons, or other occaſional drains; from exceſſes of all kinds, whether of wine, women, or the table; from worms; from violent pains in the more tender parts, ſuch as thoſe occaſioned by ſtones being forced through the ureters, or the like; from violent paſſions of the mind, ſuch as anger, joy, grief, and in particular from ſudden fright or fear; or from hyſteric or hypochondriac affections.

Epilepſies may alſo ariſe from external injuries, ſuch as wounds, blows, or bruiſes of the head; from collections of fluid, whether blood, matter, or water, on the brain; from a polypus; from bony concretions forming on the ſkull internally; or from ill conformation of the brain itſelf.

The ſymptoms are various in different perſons: ſome are ſuddenly ſeized without any previous notice, and in others the attack is foretold by a train of complaints; of theſe ſome are affected with laſſitude, heavineſs, and inactivity; a ſenſe of weight, or dull pain in the head; diſturbed ſleep, and a ſlow and unequal pulſe; paleneſs of countenance, diminution of the uſual quickneſs of apprehenſion, and a conſtant inclination to ſleep; unuſual terror of mind, noiſes in the ears, flutterings and palpitations of the heart; twitchings, or ſpaſmodic convulſions of the hands, ſo that the patient lets fall whatever he holds in them; inflation, or windy ſwelling of the breaſt, interrupted breathing, rumblings of the bowels, a diſcharge of offenſive ſtools, and of large quantities of pale urine; and ſome complain of a ſenſation like the aſcending of a cold vapour from the extremities to the vital parts.

But whether the attack is preceded by all or any of theſe ſymptoms, or none of them occur, the approach of the fit is ſudden, and in general unexpected; the patient falls inſtantly to the ground; his thumbs are contracted and fixed ſtrongly to the palms of his hands; his eyes are diſtorted, and the white parts of them only viſible; all ſenſation, both external and internal, is loſt; he froths at the mouth, and makes either a kind of hiſſing or ſnorting noiſe; if his tongue happens to be thruſt through his teeth, it is miſerably torn; and, in ſome caſes, all the joints are ſeized with a violent trembling, and in others the unhappy ſubject of this diſeaſe exhibits ſtrange and diſagreeable diſtortions and geſticulations: ſome are not convulſed, but are ſo rigidly fixed by an univerſal ſpaſm, that no art or force can move the limbs or members; and others emit their ſeed, excrement, and urine, involuntarily.

When the violence of theſe ſymptoms begins to abate, the remiſſion is only at intervals; the eye-lids remain fixed, the teeth continue to grind, or the tongue hangs out of the mouth; and the diſappearance of theſe ſymptoms denotes that the paroxiſm is at an end.

The patient now rolls himſelf reſtleſsly about; yawns as if juſt awakened from ſleep; his countenance appears heavy and melancholy; he makes efforts, apparently painful, to ſtretch and extend his limbs; ſeems uneaſy in every poſture; and, if not laid on a bed, attempts to walk with particular caution, as if afraid of falling; and the veins on his forehead appear ſwelled and diſtended.

The patient is entirely ignorant of every thing that has paſſed, looks round with ſilent wonder on his friends or attendants, and is in general ſo affected as not to know his moſt intimate acquaintance for ſome time after his recovery. In moſt caſes the fit is ſucceeded by an inclination to ſleep; the patient reſts quietly for an hour or two, and awakes much refreſhed and relieved from all his complaints, except fatigue, ſoreneſs, and head-ache.

Sometimes theſe fits return periodically, and the patient receives warning of their approach by ſome of the foregoing ſymptoms; in other caſes the returns are uncertain and wholly irregular: but in both caſes the fit may be brought on by violent exerciſe, drinking to exceſs, or ſtooping after a meal, and when the ſtomach is full of undigeſted food.

That epilepſy which is unattended with convulſive motions, and in which the patient ſeems to be aſleep, is the moſt difficult of cure: there can be no hope of removing the hereditary kind. The approach of puberty in males, and the eruption of female periodical diſcharges, or the birth of a child, frequently produce favourable changes in the habits of epileptic patients. If the firſt attack of this diſeaſe happens after the patient hath paſſed his twentieth year, the cure is ſaid to be doubtful; if after forty, altogether improbable: when the conſtitution and habit of body is good, the fits not very frequent, and unattended with highly aggravated ſymptoms, it frequently yields to a perſeverance in proper means for it's removal.

But if the fits return often, and no meaſures are taken to check their violence, the patient by degrees grows dejected, indolent, and inattentive; he is troubled with a continual giddineſs; if he lifts his eyes to obſerve any particular object above him, he is ſeized with tremblings; his temper becomes uneven and ſour; and other unhappy circumſtances contribute to render his life miſerable.

Thoſe who are ſubject to this melancholy diſeaſe ſhould eat light but nouriſhing food, and chiefly of the animal kind; pork is ſaid to be prejudicial, and thoſe fowls, the fleſh of which is brown, ſuch as ducks, geeſe, and other water fowl; windy vegetables ſhould be avoided, and ſpirituous liquors; and the wine drank ſhould be diluted with water: a free air, moderate exerciſe, and bathing, eſpecially in the ſea, will aſſiſt in preventing the returns of the diſorder; and above all things the mind ſhould be preſerved as calm and unruffled as poſſible.

In the fit, if by any means a wedge of metal can be thruſt between the patient's teeth, ſo as to ſeparate the jaws as wide as he can eaſily ſtretch them in health, the paroxiſm will generally ceaſe; and where the patient has any notice of the approach of the fit, he may prevent it by introducing ſuch a wedge into his mouth; and when the fits are preceded by any peculiar ſenſations in the extremities, ſuch as twitchings, convulſive ſpaſms, tremblings, or the like, bandages applied to the part ſo affected, and continued upwards, will often prevent the ſeizure. Extraordinary inſtances have occurred of effecting perfect cures by cutting down to the ſeat of theſe particular ſenſations wherever they are firſt perceived.

If the patient is of a full or ſanguine habit, and the diſeaſe is apprehended to ariſe from obſtructions in the brain, bleeding will be neceſſary; and in that caſe alſo, emetics and opening medicines ſhould be adminiſtered; and if the ſtoppage of any drains or uſual diſcharges has occaſioned the diſorder, they ſhould be reſtored, or others ſubſtituted as ſpeedily as poſſible.

After theſe evacuations, the following medicines have been recommended; and ſuch of them may be ſelected as ſeem beſt calculated to anſwer the immediate circumſtances of the caſe.

Take muſk, and factitious or artificial cinnabar, of each ten grains—of ſimple ſyrup, enough to make a bolus. To be taken morning and night.

Or, take of cinnabar of antimony, one ſcruple—of caſtor powdered, half a ſcruple—of conſerve of roſemary, fifteen grains. Make a bolus, to be taken every eighth hour, with three or four ſpoonfuls of the muſk julep, or the following.

Take of water, an ounce and half—tincture of ſoot, volatile tincture of valerian, and ſimple ſyrup, of each one dram. Mix for a draught.

The following volatile draught hath alſo been adviſed.

Take of caſtor, half a ſcruple—of ſalt of hartſhorn, eight grains—of ſimple cinnamon water, one ounce and half—of Damocrates's confection, one ſcruple. Make a draught.

Or, take of the powder of Peruvian bark, one ſcruple—of oil of roſemary, two drops—of ſimple ſyrup, enough to make a bolus, which may be taken every fourth hour, and after it the following draught.

Take of the ſimple bitter infuſion, one ounce and half—of chalybeat wine, two drams—of the aromatic tincture, one dram. Mix.

The following electuary is the preſcription of a phyſician, whoſe practice and writings have been very deſervedly held in the higheſt eſtimation.

Take of the bark in powder, one ounce—of wild valerian root, half an ounce—of ſimple ſyrup, enough to make an electuary. Of this a dram may be taken morning and evening; and it ſhould be continued three months, omitting the uſe of it a day or two twice or thrice in that ſpace of time. If, from any apparent ſymptoms, there is reaſon to apprehend that the diſorder is occaſioned by worms, half an ounce of powdered tin may be added to the electuary.

The flowers of zinc have been lately highly recommended for the cure of epilepſies; this medicine is directed to be taken in a pill or bolus, twice or thrice a day, beginning with ſmall doſes of a grain, and increaſing the quantity as far as the ſtomach will bear.

The extract of ſtramonium, or the thorn-apple, taken in doſes, increaſing from half a grain to a dram, is alſo ſaid to have produced very happy effects in this diſeaſe.

The *oleum animale*, or Dippel's animal oil, hath been preſcribed as an efficacious medicine in the cure of this diſeaſe, in doſes of ten, fifteen, or twenty drops, twice a day. And the ſeveral preſcriptions following have been recommended by different perſons.

Electricity, receiving the ſhock immediately as the fit approaches, if any notice is given; otherwiſe, in the intervals, increaſing the violence gradually.

Take four or five drops of liquid laudanum, in the morning faſting, every day for a week or fortnight.

Boil a handful of the leaves of the orange tree in a pint of water; ſtrain it off when cold, and divide it into two parts, one to be taken in the morning, the other in the afternoon. Repeat for a fortnight or longer.

Or, dry and powder the leaves of the orange tree, and give half a dram twice a day.

Take a dram of miſletoe of the oak powdered, every ſix hours, drinking after it a tea-cupful of ſtrong infuſion or decoction of the ſame plant.

A milk diet, perſevered in for three months without deviation, hath ſometimes proved an effectual cure.

Blue vitriol hath alſo been held to be uſeful in this diſorder, given daily, or twice a day, in ſmall doſes of a grain or two; and the ſalt of vitriol, in doſes of two or three grains twice a day, hath been recommended: but the operation of theſe medicines, and eſpecially of the former, is ſo violent, that they are ſeldom admitted as internal preſcriptions.

Aſafœtida in ſubſtance, or in tincture, perſiſted in for a conſiderable length of time, hath in ſome inſtances removed this diſorder; and both this and other medicines will be conſiderably aſſiſted by a ſeton, iſſue, or other drain.

But we muſt not omit to mention a ſimple remedy, which is ſaid to have been taken with great advantage in this diſeaſe; and though it's reputation ſeems to have been for ſome time ſuſpended, yet it hath been lately reſtored by the recommendation of very eminent phyſicians: this is the herb *cardamine*, called alſo *meadow creſſes*, *ladies ſmock*, and *cuckow flower*; the flowers of this plant muſt be gathered as ſoon as they are fully expanded, dried in the air, but not in the ſun, and reduced to a powder; which may be adminiſtered in doſes from half a dram to one dram and half, twice or three times a day, according to circumſtances, and is ſaid to have ſucceeded when opium, camphire, and other antiſpaſmodics, have failed; but no good effects are to be expected from this medicine, unleſs the uſe of it be continued for ſome months: nor muſt the patient be diſcouraged, though he ſhould be ſeized with fits after he has purſued this courſe ſome time: ſhould that be the caſe, he may probably find that the ſymptoms are leſs violent, which may inſpire him with good hope of a perfect cure.

When this diſeaſe returns at certain periods, or the approach of the fits ſeem to be influenced by the moon, the changes of that planet ſhould be attended to; and the patient ſhould prepare himſelf either by an emetic or opening phyſic, or both, according to habit of body.

Thoſe who are afflicted with epileptic fits, ſhould carefully avoid whatever tends to promote them; indigeſtive food, exceſſes, violent paſſions of the mind, and improper poſtures of the body, though not the immediate cauſes of theſe diſorders, contribute in no ſmall degree to the frequency of the returns and the violence of the ſymptoms.

CHAP. XVI.

Of St. Vitus's Dance, and other Convulſion Fits.

THE former diſorder is ſaid to take it's name from certain acts of devotion performed by female devotees at the ſhrine of a ſaint of this name, wherein they worked themſelves up to a pitch of extaſy, and uſed dances or geſtures which bore ſome affinity to the exerciſe of dancing: this diſeaſe has been by ſome aſſerted to be of a paralytic nature, by others it has been thought to be convulſive, but the more general opinion is that it partakes of both.

It may be occaſioned by an acrid humour falling on the nerves, by worms, by the obſtruction of periodical or hæmorrhoidal evacuations, or from a general debility of the nervous ſyſtem: it may alſo, in ſome caſes, mark the decline, and in others the approach, of epileptic diſeaſes.

This complaint hath been deſcribed to be a kind of convulſion, which principally attacks children of both ſexes from ten to fourteen years old, but more commonly girls: it firſt ſhews itſelf by a lameneſs, or rather an unſteadineſs or apparent uſeleſſneſs of one of the legs, which the patient drags after him like an ideot; it afterwards proceeds to affect in like manner the arm of the ſame ſide, ſo that if the hand be brought to the breaſt, or extended to any other part of the body, it can by no means be kept a moment in the ſame poſture, but is diſtorted, or ſnatched by a kind of convulſive motion into ſome other poſition; nor will any thing leſs than actual force confine it to any one ſituation. If the patient attempts to convey food or liquids to his mouth, the effort is attended with pain, and occaſions a thouſand different and odd geſtures, by the convulſive ſpaſms withdrawing his hand from the part to which it is directed; and if he ſucceeds in reaching his mouth, he is obliged to ſnatch and ſwallow it with the appearance of greedineſs, becauſe it is not in his power to continue his hand in the ſame poſture, long enough for him to take into his mouth what it offers with the decency and deliberation uſed by thoſe in health.

Though the ſymptoms which attend this diſeaſe are ſometimes ſo violent as to render the patient's life miſerable, yet it is ſeldom dangerous; and when the conſtitution is good, and the complaint hath not been of long continuance, reaſonable expectations may be formed of a ſpeedy cure. Thoſe who have been afflicted with this diſorder are, however, very ſubject to relapſes: and if it is hereditary, or become habitual through neglect or ill management,

ment, the cure may be extremely difficult, or it may degenerate into an epilepſy, or confirmed hypochondriac melancholy.

Where this diſorder is apprehended to proceed from worms, the following medicines have been preſcribed.

Take of filings of tin, from half a dram to three drams, according to the age and ſtrength of the patient, and the violence of the diſeaſe—of conſerve of rue, enough to make a bolus. To be taken twice a day.

Or, take of the filings of tin, from one ſcruple to half a dram—of rhubarb in powder, from three grains to ſix—of ſimple ſyrup, ſufficient to make a bolus. To be taken morning and evening.

In other caſes, gentle emetics are preſcribed, and a courſe of Æthiop's mineral in conſiderable doſes, with the Bath waters, if they can conveniently be taken.

Nervous and ſtrengthening medicines are alſo adviſed, ſuch as muſk, valerian, and the flowers of cardamine or ladies ſmock; the bark, orange-peel, and other bitters; chalybeats and cold bathing, particularly in the ſea.

The regimen ſhould be attended to; the food ſhould be light and nouriſhing, and the liquors mild and diluting; ſtrong drinks of all kinds, and eſpecially ſpirits, are to be avoided.

Of the *convulſions* to which infants are frequently liable, we have already treated; and the attacks of this kind to which adults are ſometimes ſubject, are for the moſt part epileptic ſymptoms of other ſpaſmodic diſeaſes.

Where they can be diſtinguiſhed from thoſe complaints by their being ſeated ſomewhat differently, they may be occaſioned by exceſſive paſſions of the mind; uneaſineſs in the bowels, ſtomach, or other nervous parts; worms; violent or acrid medicines; matter repelled from the ſurface of the ſkin; ſuppreſſion of monthly evacuations in women, or of the piles in either ſex; or from irritating poiſons.

Sometimes convulſions come on ſuddenly, and at others are preceded by certain particular ſymptoms; ſuch as coldneſs of the extremities; a ſenſe of trembling or ſhivering ſeizes the very lower part of the backbone, and runs up through the ſpine of the back like a cold vapour; the left ſide is affected with a ſtiffneſs and windy pain; the body is coſtive; the urine thin and pale; tremblings and uncommon depreſſions and languor alſo attend, and ſerve as preludes to more violent ſymptoms.

The fits are ſometimes ſhort and ſometimes of longer duration, and the muſcular contractions more or leſs ſtrong in different patients: the fit in ſome inſtances leaves a conſiderable oppreſſion of the ſpirits, together with a faintneſs, reſtleſſneſs, and ſenſe of wearineſs; and in particular caſes is followed by vomiting, ſleepineſs, and delirium; but others feel very little uneaſineſs after their recovery from it.

Thoſe whoſe habits are generally weakly, and their juices vitiated, are moſt ſubject to theſe diſorders; perſons of haſty tempers, fine parts, and delicate ſenſations, are liable to theſe dreadful attacks; and young people much more frequently than thoſe who are advanced in years.

During the continuance of the fit little or nothing can be done, but to prevent the patient from injuring himſelf by blows or bruiſes: care ſhould be taken, however, to free the patient from all reſtraint of his cloaths; and if his neck ſhould ſwell, or his face appear violently diſcoloured, it may be neceſſary to attempt giving him ſome aſſiſtance, by getting open his teeth as directed in the fits of epilepſy.

The patient ſhould be confined to a light diet, and ſhould drink diluting liquors plentifully, but in ſmall quantities at a time.

Bleeding is ſeldom to be attempted in this diſeaſe, and never during the continuance of the fit; in the intervals, where the patient is of a ſanguine habit, and feveriſh,

veriſh ſymptoms attend, it may ſometimes be neceſſary.

If the fits are occaſioned by ſuppreſſions of the periodical diſcharges, or of piles, warm baths, antiſpaſmodic medicines, and gentle opiates, are adviſeable; emollient laxative clyſters are alſo uſeful, and when the *inteſtinum rectum*, or ſtrait gut, is affected by the ſpaſms, from twenty to thirty drops of liquid laudanum may be added to the clyſter with conſiderable advantage.

The body ſhould in all caſes be kept open by manna, rhubarb, ſenna, diuretic ſalts, or other gentle purgatives; and where theſe complaints have been produced by the repulſion of the itch, or other morbid humours from the ſkin, magneſia and other abſorbents will be required to correct the firſt paſſages.

When this diſorder proceeds from worms, the worms muſt be deſtroyed, and the preſent ſymptoms allayed by clyſters of milk, with ſweet and oily ſubſtances; irritating medicines muſt in theſe caſes be avoided.

The following preſcriptions muſt be adapted to circumſtances.

Take of aſafœtida, fifteen grains—of camphire, five grains—of Damocrates's confection, one ſcruple—of ſimple ſyrup, as much as will make a bolus. To be taken every ſix hours.

Or, take the compound powder of myrrh, fifteen grains—of Ruſſian caſtor, five grains—of Damocrates's confection, one ſcruple—of ſyrup of ſaffron, enough to make a bolus. To be taken as above, with three ſpoonfuls of the following julep.

Take of water, ſix ounces—the volatile tincture of valerian, and fœtid volatile ſpirit, of each three drams—of Ruſſian caſtor, two drams—of white ſugar, three drams.

Muſk, given in pretty large doſes, produces very favourable effects, and may be taken in either of the forms which follow.

Take of muſk, from half a ſcruple to half a dram, in proportion to age and other circumſtances—of conſerve of roſes, as much as will make it into a bolus, which may be repeated every fourth or ſixth hour.

Or, take of muſk, rubbed with white ſugar, half a dram—of ſimple nutmeg water, five ounces. Make a julep, of which two or three table-ſpoonfuls may be taken every third or fourth hour.

Where particular parts of the body are affected by convulſive ſpaſms, external applications may ſometimes be ſucceſsful; in theſe caſes bliſters upon the part affected will frequently afford relief; embrocations alſo, either with æther, or the ſaponaceous or volatile liniments, have been recommended; and Bates's anodyne balſam, with the addition of a ſmall quantity of the expreſſed oil of mace and oil of mint, hath ſometimes produced happy effects.

CHAP. XVII.

Of the Tetanus, and locked Jaw.

OF the firſt, which is a ſpaſmodic or convulſive diſorder, there are three diſtinct kinds: the *emproſthotonos*, in which the body is bent violently and rigidly forward; the *opiſthotonos*, wherein the body is in like manner inclined backward, and that which is properly called the *tetanus*, when the body is held in an erect poſture.

Theſe dreadful caſes are moſt commonly met with in warm countries, but ſometimes occur even in theſe milder climates; and may be occaſioned either by the irritation of a wounded nerve or tendon, or from the ſtoppage or imprudent check of ſome immediate diſcharge, ſuch as diarrhœa, dyſentery, or the like.

In the former caſe, the firſt care will be naturally directed to the wound; and proper applications to leſſen the acute pain of the affected part will conſiderably aſſiſt the operations of medicine.

Thoſe which are recommended in this caſe are principally opium and muſk: when the patient can ſwallow, they may be adminiſtered in the following manner.

> Take of muſk, from eight grains to twelve—of opium, from one grain to five—of *theriaca Andromachi*, enough to make a bolus. Repeat it every four or ſix hours, with a few ſpoonfuls of the muſk or camphire julep.

The quantities in which theſe medicines are to be adminiſtered, muſt be directed by the patient's habit of body, the violence of the ſpaſms, and other circumſtances.

When medicines cannot be got down by the mouth, ſtill larger quantities of opium ſhould be diſſolved and thrown up in clyſters; the warm bath ſhould be frequently uſed, and the patient ſhould be carefully covered with warm flannels, and laid in his bed the moment he comes out of the water: bladders of warm water, or fomentations applied to the belly and ſtomach, may alſo be uſeful; and warm plaſters, with embrocations of the volatile liniments, may help to relax the limbs.

Or the following—

> Take the ſaponaceous liniment, and Barbadoes tar, of each two ounces—of the balſam of Peru, two drams—oil of roſemary and lavender, of each half a dram—of opium, a dram. Make a liniment.

If, at the firſt approach of the ſpaſm, the pulſe is ſmall, ſlow, and languid, and afterwards grows more quick, but becomes irregular and intermitting, it may be neceſſary to adminiſter clyſters with the fœtid gums, and to give ſuch cordial medicines as caſtor, ſpirit of hartſhorn, or the volatile fœtid ſpirit.

The *locked jaw* is a rigid contraction of the muſcles which raiſe the lower jaw; and may ariſe from nearly the ſame cauſes as the diſorders laſt mentioned, though it has been frequently attributed to cold.

The treatment may be principally the ſame as that directed in the *tetanus*, though in this caſe bliſters are ſometimes admitted, and are applied either to the throat or between the ſhoulders; the oil of bricks is alſo recommended to anoint the jaw; and flannels moiſtened with camphorated oil and liquid laudanum, and applied to the jaws and neck, have ſometimes given relief.

But opium is in this complaint alſo to be chiefly depended on for the cure: if it can be conveyed into the patient's ſtomach by the mouth, it may be given with muſk and camphire, as preſcribed in the former part of this chapter; but as this is ſeldom poſſible until the violence of the diſorder is conſiderably abated, the clyſters, with ſtill larger proportions of opium, muſt be frequently adminiſtered, until the ſymptoms give way, and the patient is reſtored to a capacity of receiving nouriſhment and medicine in the natural way.

After any of theſe ſpaſmodic diſorders, great care is neceſſary to prevent returns; the uſe of the opium ſhould be diſcontinued gradually; the ſpine of the back ſhould be rubbed with a mixture of the volatile liniment and Barbadoes tar; and the patient ſhould enter on a courſe of the bark: to theſe medicines muſt be added a ſtrict regard to regimen, both as to diet, air, and exerciſe; the food ſhould be light and eaſily digeſtive, and the drinks ſuch as are neither heating or windy; the patient ſhould breathe a free air, but carefully avoid expoſure to cold, damp, or moiſture; he ſhould wear a piece of flannel over the pit of his ſtomach, and take particular care not to ſuffer his feet to be wet; he ſhould take conſtant but very moderate exerciſe; and, above all things, guard againſt violent paſſions of the mind, which tend in a very great degree to irritate the nerves, and diſpoſe the human frame to theſe moſt melancholy and frequently fatal diſorders.

CHAP. XVIII.

Of the Palpitation of the Heart.

THE *palpitation of the heart* is a quick, ſtrong, and irregular trembling or vibratory motion of that organ, to which thoſe are moſt ſubject who are of a firm, ſanguine habit, and melancholy diſpoſition; thoſe whoſe minds are tender, and who are ſubject to alarms and frights: young perſons who are full of blood and juices, and thoſe whoſe evacuations of blood, either periodical or accidental, are ſuppreſſed or checked, are more peculiarly liable to it.

This diſorder may be occaſioned by a defect in the evacuations laſt mentioned; by a ſubtle acrid matter in the blood, produced by the repulſion of the itch, or ſome other eruptive diſorder; by violent agitations of mind; by intenſe ſtudy or thoughtfulneſs; by an aneuriſm or polypus; by hectic heats; by ſtrictures of the belly and limbs, from wearing too ſtrait cloaths; and in young women tight ſtays are not unfrequently the cauſe of this diſorder.

This diſeaſe frequently intermits, and more eſpecially during the time that the body is at reſt; but after the occurrence of any of the cauſes above mentioned it returns, and very often with redoubled violence; the pulſations are ſometimes ſo great, that the motions may be perceived even through the cloaths; it is more or leſs violent at different times, and the duration of the paroxiſm is equally uncertain: ſometimes the attack is made whilſt the patient ſleeps, and he is ſuddenly awaked by this diſagreeable and painful ſenſation; in ſome inſtances it only happens in the day, and is felt moſt ſeverely after eating; in others the attack is preceded by anxiety and uneaſineſs about the breaſt; during the paroxiſm the breathing is more or leſs difficult, the pulſe is intermitting, and does not correſpond with the motion of the heart, but is low and weak; when the ſymptoms are moſt violent, the uneaſineſs about the breaſt increaſes, and is accompanied with conſiderable languor of the whole body, and after the fit of palpitation is over, it is ſucceeded by an univerſal tremor, and particularly of the joints. When polypous concretions in the heart cauſe palpitations, the painful vibration is augmented immediately after uſing any violent exerciſe, and even going up ſtairs, or the ſlighteſt commotions of the blood, increaſe the complaint; the anxiety about the breaſt is aggravated, the pulſe is weak, unequal, and ſometimes intermitting; the difficulty of breathing is heightened even to a degree of ſuffocation, and fainting fits come on, which are ſometimes fatal. Whilſt the polypus continues fixed, no palpitations are felt, but when it is removed, and fluctuates in the ventricles of the heart, partially or wholly ſtopping the paſſage of the blood through ſome or other of the veſſels, a palpitation enſues, and ſpeedy death is the probable conſequence. When a redundance of blood is the occaſion of a palpitation, the countenance is florid, the veſſels diſtended with blood, and the pulſe is large and ſtrong. The longer the intervals are between the pulſations, the more violent are thoſe motions, and the more dangerous is the fit. One particular ſymptom always attends and diſtinguiſhes the palpitation of the heart, which is an acute and pungent pain above the right orifice of the ſtomach.

When the paroxiſms of this diſorder are violent, return frequently, and continue a conſiderable length of time, a fatal ſwooning or ſuffocation is always to be apprehended; and an unequal pulſe, with a conſiderable difficulty of breathing, are dangerous ſymptoms: when it proceeds from a fright or terror, and returns often, it threatens to produce a polypus, which may prove of the very worſt conſequence.

Bleeding, as copiouſly and frequently as the patient's habit of body, conſtitution, and ſtrength, will admit, is the chief remedy that can be offered; but if the diſorder ſhould proceed from weak nerves, or a relaxed habit of body, this evacuation muſt be omitted; and in that caſe nervous medicines, the bark, and ſteel, muſt be depended on.

If the fit is occaſioned by wind in the ſtomach, or the patient is coſtive, his ſkin dry, and his extremities cold, oily and warm clyſters will be neceſſary, and the feet ſhould be rubbed with hot flannels and immerſed in a warm bath: if an aſthma attends the palpitation, bliſters will be neceſſary; and the volatile tincture of valerian, or other volatile drops in the infuſion of valerian, may be given twice or three times a day as circumſtances may require.

When the palpitation ariſes from a weak and irritable ſtate of the ſtomach, gentle emetics, the *tinctura ſacra*, or ſacred tincture, by way of purge, and bark as a ſtrengthener, are the beſt remedies; and immediate relief may probably be obtained from the uſe of æther, ſpirits of hartſhorn, or the following preſcriptions.

Take of tincture of caſtor, half an ounce—of ſimple alexiterial water, ſix ounces—of ſyrup of ſaffron, half an ounce. Mix to a julep, of which take a ſpoonful occaſionally.

Or, take of the volatile tincture of valerian, one ounce—of pennyroyal water, eight ounces—of ſyrup of ſaffron, one ounce. Make a julep, a ſpoonful of which may be taken frequently.

When this diſorder proceeds from gouty ſpaſms, bliſters, warm baths for the feet, and volatiles, are moſt likely to give relief; to which, if the patient is full of blood, bleeding may be added to good purpoſe.

Moderation in diet and exerciſe are to be recommended; exceſs in either will increaſe the diſorder, and prove dangerous: but nouriſhing food and gentle motion will contribute to the removal of this diſorder, by furniſhing the patient with ſtrength to reſiſt it's attacks.

To prevent the returns of this complaint, the particular cauſes which produce it ſhould, if poſſible, be diſcovered, and carefully avoided; and, in particular, if ſymptoms of a polypus occur, it will be neceſſary to abſtain from all violent exertions of body, or agitations of mind, either of which may tend to looſen it. In every caſe all ligatures and compreſſions of the body, and particularly about the breaſt and ſtomach, ſhould be removed, and the cloaths ſhould be made perfectly eaſy; the patient ſhould never continue long in the cold, nor expoſe himſelf to the hazard of getting wet, eſpecially in the feet: upon the approach of a fit, the extremities ſhould be well rubbed, and a clyſter inſtantly adminiſtered; and it behoves the patient himſelf, and thoſe about him, to keep his mind as calm and undiſturbed as poſſible in this diſeaſe, exceſſive paſſions having often produced effects almoſt inſtantaneouſly fatal.

CHAP.

CHAP. XIX.

Of the Hiccup, Night-mare, and Spaſms or Cramp in the Stomach.

THE former of theſe complaints is a ſpaſmodic or convulſive motion of the ſtomach, gullet, and muſcles which ſerve the purpoſes of ſwallowing: it is the general opinion that the ſtomach alone is the ſeat of this diſorder, though ſome have conceived that the diaphragm is affected.

The immediate cauſe is allowed to be an irritation of the ſtomach, occaſioned by improper food or liquors, or by exceſſes in either; by wounds or other injuries to the ſtomach; by inflammation there, or in the diaphragm or other inteſtinal parts; by ſharp or acrid poiſons; or by ſour juices, indigeſtion, and wind in the ſtomach or bowels.

In mortifications, malignant fevers, and ſome other acute diſeaſes, it is generally a very alarming ſymptom, eſpecially when it follows conſiderable hæmorrhages, or other large evacuations.

When it happens in tender ſtomachs from making a hearty meal, or from eating hard or windy food, relief may generally be obtained by drinking a glaſs of good wine, or of any ſpirituous liquor, diluted with an equal quantity of warm water.

When this complaint ariſes from the irritation produced by poiſonous matter, emetics are firſt neceſſary; after which large draughts of milk, and frequent doſes of oil, both ſwallowed and given in clyſters, will be ſerviceable: and where it is occaſioned by any of the patient's food remaining undigeſted on his ſtomach, a table-ſpoonful of ſtrong vinegar will frequently give relief.

If the *hiccup* proceeds from inflammation of the ſtomach or other internal parts, it is attended with a very conſiderable degree of danger; in this caſe bleeding will be neceſſary, the ſtomach ſhould be fomented, or bladders of warm water applied to it; and the patient ſhould drink diluting liquors, or, according to the ſtate of his pulſe, wine whey, with a ſmall quantity of ſweet ſpirit of nitre in every draught.

If it is ſymptomatic, and attended with wind, it is commonly relieved by the fœtid volatile ſpirit, with a few drops of liquid laudanum; the muſk julep is alſo ſerviceable; but when it originates in a foul ſtomach, gentle emetics and purges will be neceſſary, to the latter of which ſhould be added ſmall quantities of opiates.

If the hiccup is apprehended to proceed from mortification, the bark and other antiputreſcents are the only remedies which afford any hope of ſucceſs.

When this complaint is obſtinate, and the returns of it frequent and violent, the following medicine hath been recommended.

> Take the fœtid volatile ſpirit, and tincture of wormwood, of each two drams. Mix them, and take forty or fifty drops frequently in a ſpoonful or two of the muſk julep. A few drops of liquid laudanum may be added occaſionally.

But in thoſe caſes muſk is the moſt powerful remedy, and may be given in doſes from ten grains to twenty made into the form of a bolus, when the violence of the ſymptoms directs; or a few drops of the volatile aromatic tincture, or the compound ſpirit of lavender, may be taken now and then on a lump of ſugar; and plaſters of Venice treacle, or the common ſtomach plaſter, may be applied to the pit of the ſtomach.

The *incubo*, *incubus*, or *night-mare*, generally,

nerally affects thoſe who are troubled with indigeſtions and crudities in the ſtomach; it is ſaid to precede or lay the foundation for an epilepſy.

This diſorder hath been attributed to a ſtagnation of blood in the brain and lungs, and to a redundancy of blood; but it is unqueſtionably a nervous complaint, and ariſes principally from indigeſtion; ſo that thoſe whoſe nerves are weak, who lead inactive lives, and indulge themſelves in the pleaſures of the table and bottle, are moſt commonly afflicted with it. It is frequently occaſioned by wind, and thoſe who are ſubject to it ſhould avoid much vegetable or other flatulent food; ſtudy, anxiety, grief, or other oppreſſions of the mind, may alſo produce this diſeaſe; but late and heavy ſuppers contribute more than any thing to this diſagreeable ſenſation.

This diſeaſe always attacks the patient in his ſleep, and is at firſt felt in an uncommon load, weight, and preſſure, on the breaſt and ſtomach, threatening inſtant ſuffocation, and depriving the ſufferer of the powers of ſpeech, who in vain ſtruggles to diſengage himſelf from the ſuppoſed burden, and to cry out for help: in this ſituation he is terrified with apprehenſions of inſtant danger; ſometimes his imagination preſents enemies ready to murder him, and at others he fancies himſelf in the fire, the water, or falling from a precipice; at length he ſtarts, groans, or cries out, and then the tormenting phantom ſeems to leave him ſuddenly; and awaking, he finds his ſtrength exhauſted, his ſpirits depreſſed, and an univerſal palpitation or tremor through his whole frame.

When the patient happens to lie on his back, this diſorder ſeizes him, and in no other poſture; the moment he is moved, or any attempt is made to awake him, the complaint vaniſhes.

When the returns of this troubleſome diſorder are frequent, if the patient is of a full or ſanguine habit of body, it may be proper to bleed; in all caſes it is neceſſary to keep the body open.

Some recommend a glaſs of brandy to be taken at going to reſt, but this is undoubtedly the introduction of a very bad cuſtom; perhaps a little peppermint water may be as effectual, unleſs the patient eats a very hearty ſupper of windy food, in which caſe a ſmall quantity of ſpirits will be uſeful.

But if the patient uſes moderate exerciſe, avoids all hard and windy food, is cautious and temperate in the uſe of liquids, and goes to bed with a light ſupper and a chearful mind, he may in general, without the aſſiſtance of medicine, bid defiance to this dæmon of darkneſs.

The *cramp in the ſtomach* is a dangerous complaint, ſuddenly ſeizing the aged and infirm, and thoſe who are of gouty, nervous, or hypochondriac habits, and without immediate aſſiſtance bringing on convulſions and ſpaſms, which often end fatally.

The treatment of this complaint muſt be nearly ſuch as we have directed in the tetanus and other ſpaſms occaſioning external rigidity of the muſcles; clyſters of the laxative kind, if the patient is coſtive, and conſiderable quantities of liquid laudanum, either taken in a ſpoonful or two of any proper liquid, or adminiſtered by way of clyſter with warm water, will be moſt likely to give eaſe; in the former caſe from twenty to thirty drops may be given, and in the latter from forty to ſixty: if the patient complains of ſickneſs, nauſea, or inclination to vomit, his ſtomach may be waſhed out with camomile or carduus tea.

Muſk may alſo be given to the quantity of ten or twelve grains, with Venice treacle enough to make it into a bolus; and this may be repeated every four, ſix, or eight hours, according to circumſtances, with a ſpoonful or two of the camphire julep after every doſe.

The ſtomach plaſter, or a plaſter of Venice treacle, may alſo be applied to the pit of the ſtomach, which ſhould firſt be rubbed with the volatile or ſaponaceous liniment, adding a few drops of liquid laudanum to either; or Bates's anodyne balſam, may anſwer the ſame purpoſe; fomentations and bladders of warm water are likewiſe recommended.

Bliſters to the ancles have been adviſed where the pains of the ſtomach are violent and of long continuance; and if the patient's ſtrength and habit of body will admit of bleeding, this evacuation may be uſeful; but if the complaint is apprehended to ariſe from gouty matter, this operation will be dangerous, and in this caſe cordials will be neceſſary.

There is alſo another diſorder of the ſtomach, which is called the *ſtomachic paſſion*, which is attended with ſymptoms equally horrible and dangerous; this diſeaſe, however, occurs but ſeldom.

The ſymptoms are an averſion to food, the very thought of which occaſions heartburn, anxiety, an effuſion of ſpittle, nauſea, and vomiting: the patient endures hunger without complaint, but chewing his food is troubleſome, and ſwallowing it intolerable; though he abhors common food, yet he has deſires for things improper and unuſually eaten; if he has been prevailed on to get down any nouriſhment, he complains immediately afterwards of violent pains between the ſhoulders. After the diſeaſe has continued ſome days, the patient grows reſtleſs, his ſight becomes dim, he has noiſes in his ears, heavineſs in the head, and a torpor or numbneſs of the limbs; ſometimes he imagines that the ſpine of his back is drawn towards his legs, and in whatever poſture he is placed, ſhifts it almoſt inſtantaneouſly, ſeeming to be in perpetual agitation; he deſires to drink without being thirſty, and continues to walk about though he complains of drowſineſs and inclination to ſleep; he grows pale, thin, feeble, faint, fearful, reſerved, but fretful, and inclines to moping and melancholy.

During a fit or violent paroxiſm, the patient frequently faints; his joints are cold and numbed, whilſt the palms of the hands and other parts of the body are hot or covered with a dew-like moiſture; to theſe ſymptoms ſucceed increaſed reſtleſſneſs and anxiety; deſpondency, alteration of the countenance, a ſmall weak pulſe, and a waſting of the body for want of ſuſtenance; or, on the contrary, a ravenous appetite without digeſtion, and an acid, acrid, or putrid quality, in the contents of the ſtomach: in the aggravated ſtate of this diſeaſe the patient is ſpeechleſs, and his teeth clenched or grinding; and when there is any conſiderable degree of inflammation, the ſwallowing is difficult, and attended with a kind of ſtrangulation, which has been denominated a *ſtomachic quinſey*; hardneſs or tenſion of the ſtomach, wind, and rumblings of the bowels.

The cauſes are ſaid to be a diſcharge of matter from the belly upon the ſtomach, intenſe thought, grief, neglect of proper nutriment, and want of reſt; colds, continued indigeſtions, vomiting, and other violent or exceſſive evacuations.

In order to obtain a cure, the firſt attention muſt be to gratify as much as poſſible all the patient's inclinations, and to compoſe his mind and ſpirits; the juice of quinces is recommended as highly ſerviceable, and warm and ſpicy ſtimulatives, ſuch as pepper and ginger, with aloes and other bitters, are ſaid to be uſeful: muſk and opium will be proper during the fit, provided the inflammation do not run high; and after the complaint is removed, the return of it may be prevented by the bitter decoctions, the bark, and chalybeats.

CHAP. XX.

Of the Loſs of Spirits, and Fainting Fits.

THE former of theſe is commonly conſidered as a diſorder of the mind, but it is frequently occaſioned by bodily diſeaſe; and all thoſe whoſe nerves are weak, are more or leſs liable to low ſpirits.

When the bowels and ſtomach are in a relaxed ſtate, the ſpirits will be affected, and in theſe caſes infuſions of the bark with ſpices, and preparations of ſteel with aromatics, may be uſeful; if the depreſſion of ſpirits proceeds from foulneſs of the ſtomach and bowels, or obſtructions in the inteſtines, purges of the *tinctura ſacra*, or ſacred tincture, will be neceſſary; and when it is occaſioned by ſuppreſſions of the periodical diſcharges, or of the piles, theſe evacuations muſt be reſtored, or others ſubſtituted; and, in the mean time, bleeding will be of eſſential ſervice.

But whether lowneſs of ſpirits is the effect of theſe, or any other accidental cauſe, or is brought on by grief, anxiety, or diſtreſs, the removal of the complaint does by no means depend wholly on medicine; on the contrary, air, exerciſe, generous living, lively or amuſing company, and change of ſituation, are much more important than the beſt-conceived medical preſcriptions: theſe may no doubt aſſiſt in the cure; but when the mind is relieved from the preſſure under which it has laboured, and regains it's vigour and alacrity, the body will ſoon be reſtored to health and ſtrength, and vibrate in uniſon with it's powerful director.

Fainting fits alſo ariſe from weak nerves; and thoſe whoſe conſtitutions are naturally delicate, or have been reduced by acute diſeaſes, or chronic and lingering pains, are moſt ſubject to them: in the firſt inſtance they are ſeldom dangerous; but when from neglect the returns are frequent, and they become habitual, they always prove prejudicial, and in ſome caſes fatal.

The ſlighteſt degree of this diſorder is when the patient perceives and underſtands what paſſes, but is incapable of ſpeaking; this is called *fainting*, and often happens to thoſe who are ſubject to windy complaints, without the pulſe ſuffering any remarkable change or alteration. If he loſes his underſtanding and feeling, and the pulſe ſinks conſiderably, it is called a *ſyncope* or *ſwooning*; and if this ſyncope is ſo violent that the pulſe ſeems extinguiſhed, and the breathing cannot be diſcerned, with a coldneſs of body, and a wan and livid countenance, it is called an *aſphixy*, which may ſignify a total reſolution, as it is frequently followed by death.

The cauſes may be either a redundancy or want of blood; indigeſtion, or other diſorder of the ſtomach; nervous complaints; paſſions of the mind; a polypus in any of the principal blood veſſels; opiates, and other volatile and active medicines; ſudden changes from heat to cold, and the contrary; exceſſive weakneſs of body; faſting; loſs of blood, or other violent evacuations; and worms.

Perſons, who without any manifeſt cauſe are ſubject to frequent faintings, uſually die ſuddenly; and they are often found to have polypuſes in ſome of the chief blood-veſſels: when fainting fits are brought on by violent paroxiſms of anger or rage, they are dangerous, and equally ſo when occaſioned by worms.

The air, which has been repeatedly breathed, loſes it's ſpring or elaſticity, and becomes unfit for the purpoſes of reſpiration; hence thoſe who frequent aſſemblies and other polite places of public amuſement, are extremely ſubject to fainting fits: it therefore behoves the tender and delicate to avoid ſuch contaminated air, and thoſe who have the conduct and ſuperintendance of public places, to let them be well ventilated, and purified by the admiſſion of conſtant ſtreams of freſh air.

Great caution is alſo neceſſary to be uſed by perſons who have been long expoſed to cold, and who generally faint upon entering a houſe, approaching the fire, or drinking hot liquors; to avoid theſe inconveniences, ſuch perſons ſhould take care not to go into a warm room immediately after an expoſure to a cold air, to approach the fire by degrees, and neither to eat or drink any thing hot or heating, till the body has been gradually reſtored to a temperature moderately warm.

All that can be done during the continuance of the fit, is to endeavour to reſtore the motion of the heart by placing the patient in a fit poſture; vinegar and water, or water alone, may be ſprinkled on his face, and a little of the former ſhould be poured down his throat; ſtrong vinegar ſhould be held under his noſtrils, the fumes of this acid heated ſhould be introduced into the room, and as ſoon as the patient can ſwallow, he ſhould take a glaſs of good wine, or of ſome other cordial; he ſhould alſo be removed into the open air, or brought to the window, and ſhould be laid on his back, with his head rather lower than the other parts of the body.

After the fit, attempts ſhould be made to remove the cauſe: if it ſhould be pain, ſmall doſes of opiates may be given at convenient diſtances; if violent evacuations have occaſioned faintings, gentle anodynes ſhould alſo be preſcribed, and a light cordial and nouriſhing diet, to the liquid part of which ſaffron may be added, but neither fluids or ſolids ſhould be ſwallowed in any conſiderable quantities at a time.

When the patient is of a robuſt habit, and is overcome by a redundancy of blood, it will be proper to bleed, but this operation ſhould not be performed till after his recovery from a fit, unleſs ſome very particular circumſtance occurs, which demands the immediate loſs of blood. If indigeſtion, or other diſorder in the ſtomach, is the cauſe, a vomit may be given in the firſt inſtance; and in nervous caſes, an eaſy reclining poſture, freſh air, and ſweets or fœtids held to the noſe, both being tried to diſcover which has the beſt effect, give ſpeedy relief. When the paſſions of the mind, ſuch as anger, grief, or the like, occaſion this diſorder, the fits are frequently tedious, and when removed, return at very ſhort intervals: in theſe caſes the patient ſhould be kept quiet, the ſtrongeſt vinegar ſhould be held to his noſe, and as ſoon as he begins to recover, adminiſter ſmall doſes of liquid laudanum in any cordial water, and now and then let him take the ſweet ſpirit of vitriol in his common drink; if he complains of nauſea or ſickneſs, with a bitteriſh taſte in his mouth, a gentle emetic will be neceſſary, and after it the ſweet ſpirit of nitre, or nitre itſelf, with a ſmall quantity of rhubarb. And though in moſt common caſes of fainting bleeding is rather injurious, and particularly where the patient is of a delicate or nervous habit, yet when the patient is in other reſpects ſtrong and healthy, and the diſorder hath been brought on by any immediate diſcompoſure of the mind, either from fright or anger, it may be neceſſary; but in thoſe caſes it will be proper that he ſhould drink freely of warm diluting liquors, acidulated with lemon or orange juice, and keep himſelf perfectly quiet for ſome hours after the operation.

It is almoſt unneceſſary to ſay, that the faintings of women during pregnancy, and thoſe which are occaſioned by offenſive ſmells or the like, may in general be removed by carrying the patient into the air, and applying volatile ſalts, Hungary water, or eau de luce, to the noſtrils during the fit, and giving a cordial immediately after recovery.

When theſe fits proceed from actual weakneſs, brought on by exceſſive fatigue, want of ſuſtenance, or loſs of blood from wounds, or evacuations of the like kind, a nouriſhing diet, and ſmall quantities of good and generous wines, diluted with water or not as circumſtances may direct, will effectually prevent their return; but in caſes of long faſting, great care ſhould be taken that the patient returns to his uſual portion of food gradually, as the ſtomach will at firſt be incapable of retaining any conſiderable quantity, nor will the powers of digeſtion be immediately ready to perform their part towards carrying it off.

CHAP. XXI.

Of Lethargic Diſeaſes.

THE *coma, lethargy, coma vigil, coma ſomnolentum, cataphora,* and *carus,* are diſeaſes of ſleeping, or the total want of it; of theſe diſorders the coma is the leaſt dangerous, and the lethargy moſt fatal.

The immediate cauſe of all the kinds of ſleepy diſorders, or thoſe in which ſleep is concerned, is apprehended to be a defect or obſtruction of the vital principle, occaſioned by tumors preſſing on the brain, or collections of watery fluids there; by a fulneſs of the veſſels, occaſioned by the ſuppreſſion of periodical diſcharges, or ſtoppage of the hæmorrhoidal bleedings; they may alſo be occaſioned by an exceſſive uſe of ſpirituous liquors, by expoſure to poiſonous or offenſive ſteams or vapours, and by blows on the head, or other external injuries.

In the *coma vigil,* or *watchfulneſs,* the patient feels a ſtrong inclination to ſleep, but is either wholly incapable of taking reſt, or if he falls into momentary ſlumbers, he awakes without being in the ſmalleſt degree refreſhed: this complaint is attended with a general burning pain in the head, and a ſenſe of ebullition in the brain, like the fermenting of liquors, but the patient is not delirious; it is always ſymptomatic, accompanies acute fevers, and generally precedes and denotes the approach of a phrenzy.

The *coma ſomnolentum* produces languor and perpetual drowſineſs; the patient drops aſleep whilſt he is eating, in converſation, or engaged in buſineſs; he is eaſily awaked, but ſoon falls aſleep again; and notwithſtanding this diſpoſition, ſeems to be in perfect health. This diſorder generally ſeizes thoſe who are advanced in years, and lead inactive and luxurious lives.

The *carus* is a profound ſleep, out of which the patient cannot be rouzed without extreme difficulty; though he ſeems ſenſible of pain when attempts are made to awaken him by pinching or pricking his fleſh, yet he either remains ſilent, or uttering a few words, falls again into the ſame degree of ſleep.

This diſorder is ſometimes original, and at others ſymptomatic; in the latter caſe, if it happens in the beginning or during the progreſs of acute fevers, and is attended or followed by hiccups or convulſions, it is ſoon fatal: when the fever is at the height, or on the decline, and the patient is conſiderably weakened, though the ſleep be of extraordinary duration, yet if it is accompanied with gentle perſpiration, it is rather a favourable omen; but when the patient's ſtrength is ſo wholly exhauſted that he lies without ſenſe or motion, this ſleep is generally his laſt.

A *lethargy* is a heavy continued ſleep, with very few intervals of waking, and thoſe only of ſhort duration: and ſo compleatly is the patient loſt in ſtupefaction, that if he opens his mouth to yawn or receive ſuſtenance, he forgets to cloſe it; and if he ſets about eating, putting on his cloaths, or any other employment, he ſtops in the midſt of it and falls faſt aſleep. It is a ſpecies of apoplexy, though not ſo immediately deſtructive, and is attended with a fever and quick pulſe.

The brain of thoſe who have died of ſleepy diſorders, hath in ſome inſtances been found to be overflowed with water, and in others abſceſſes, tumours, and ſcirroſities of the brain, have been diſcovered; and in moſt the veſſels of the *pia mater*, or that membrane which involves the brain, have appeared to be very much diſtended with blood.

A lethargy is always attended with danger, but more particularly when the limbs are affected with a general tremor, and a cold clammy ſweat appears on the face.

When the cauſe is apparently an exceſs of the vital powers, and a conſiderable fever attends, the membranes of the brain may be apprehended to be in an inflammatory ſtate, and bleeding will be abſolutely neceſſary: but this caſe ſeldom occurs; the vital powers are generally below the ſtandard of health, and if there is a fulneſs, it is of that kind which does not admit of bleeding, but muſt be carried off by purges, and ſuch medicines as promote evacuations by urine and perſpiration.

When the animal powers are manifeſtly defective, the patient may be relieved by holding volatile ſalts to the noſtrils; but pungent acid ſpirits are preferable, of which the ſpirit of verdegriſe may be uſed if it can be procured; if not, ſtrong vinegar may be blown up the noſe.

Emetics may be uſed where it is apprehended that the ſtomach is over-loaded; but if there is any particular fulneſs, theſe medicines muſt be omitted, and clyſters with rock-ſalt ſhould be frequently adminiſtered: the body may be kept open by manna, rhubarb, or the diuretic ſalts; and bliſters may be applied to the neck and feet, or ſtimulating cataplaſms to the latter may perhaps anſwer the purpoſe better.

Such medicines as, being ſnuffed up the noſe, promote a diſcharge of matter from the head, and excite ſneezing, are alſo recommended in lethargic caſes; but they ought to be uſed with much caution, if the patient is of a ſanguine habit or full of blood, as they invite the flux of humours upwards, and ſo endanger an apoplexy: where they can be uſed with ſafety, one of the beſt is made by diſſolving ten grains of white vitriol in half an ounce of water.

If the body, and particularly the lower extremities, are frequently well rubbed with a fleſh-bruſh or warm flannel, it may be of conſiderable uſe.

When either of theſe diſorders is occaſioned by blows or other external injuries, and an extravaſation of blood or ſerum is ſuſpected, bleeding may be uſed more freely, and the ſame methods ſhould be taken as are uſually directed to relieve contuſions on the head; though in this caſe, if the ſymptoms are violent, the operation of trepanning is generally found neceſſary.

If the bowels or other inteſtines are affected with ſpaſms, the antimonial wine may be preſcribed; and the following medicines may in moſt caſes be uſeful after neceſſary evacuations.

Take ſalt of hartſhorn, and ſalt of wormwood, of each one ſcruple—of white wine, an ounce and half. Make a draught, to be taken every night.

Take the volatile tincture of guaiacum, and volatile tincture of valerian, of each two drams. Take from one tea-ſpoonful to two, twice or thrice a day.

Pouring cold water on the head, after it hath been ſhaved for the purpoſe, is alſo recommended, and may tend to remove the ſleepineſs, and ſtrengthen the membranes of the brain.

After recovery from theſe diſeaſes, relapſes muſt be carefully guarded againſt, by regulating the diet, which ſhould be light and nouriſhing; by avoiding all exceſſes, and heavy ſuppers; and by the uſe of conſtant moderate exerciſe, which muſt be proportioned to the patient's ſtrength, ſo as not to produce fatigue.

CHAP. XXII.

Of Hyſteric and Hypochondriac Diſorders.

HYSTERICS may be claſſed among thoſe nervous diſorders, the variety, uncertainty, and obſtinacy of which, have hitherto baffled the utmoſt efforts of medicinal ſkill to diſcover certain cures, or to preſcribe with any degree of well founded confidence a ſyſtem of medicine and regimen.

Theſe diſorders have been ſuppoſed, as may be gathered from the name, to ariſe at firſt from a preternatural irritability of the womb; it is, however, undoubtedly produced by the irritation of the nerves, either general in the whole habit, or of the ſtomach, inteſtines, or ſome other particular part; and girls towards the approach of the periodical diſcharge, and women of relaxed and tender habits, and who are in the firſt ſtages of pregnancy, are moſt liable to it.

Hyſteric complaints may be occaſioned by the ſame cauſes as are productive of other nervous diſeaſes, but are uſually brought on by wind or acrid humours in the ſtomach; by the obſtruction or ſuppreſſion of the female evacuation; or by violent agitation of mind, from anger, grief, or vexation.

Theſe diſorders are marked by a great variety of ſymptoms, the principal of which are, a ſtrangulation and a riſing in the throat, as if a ball was forcing it's way up; a difficulty of breathing threatening ſuffocation; loſs of voice, and a fainting fit, in which the patient ſeems to be in a profound ſleep, and can ſcarce be diſcovered to breathe, the belly is ſwelled, the navel drawn inward, and an univerſal chillneſs and ſhivering affects the whole frame.

But both the approach and the decline of the fit are accompanied with a variety of other ſymptoms; ſuch as a frequent diſcharge of very pale and clear urine, anxiety, palpitation of the heart, general tremor, low and unequal pulſe, coldneſs in the extremities, a pale or ſallow countenance, impaired ſight and hearing, twitches, convulſions, alternate fits of laughing, crying, and ſobbing; deep ſighs, oppreſſion, low ſpirits, involuntary tears, and ſometimes ſickneſs, vomiting, and incapability of retaining food or liquids on the ſtomach: and however dangerous the patient's ſituation may appear during the continuance of the paroxiſm, yet as ſoon as it goes off all complaints vaniſh with it, and the patient remains in apparent health till another attack.

Theſe complaints are ſeldom fatal, except they are ſucceeded by epilepſy or apoplexy; yet it is neceſſary to attempt removing the cauſes of them, as they become more obſtinate at every return, and at length attain ſuch a degree of ſtrength as to bring on a total relaxation, and render the cure extremely difficult, if not wholly impracticable.

When the patient is of a ſtrong and robuſt habit, and where the pulſe is full, it may be neceſſary to bleed; but weak and delicate conſtitutions, which are generally the ſubjects of theſe complaints, will not endure this evacuation, and more eſpecially where the diſorder is rooted in the habit, and by long continuance and frequency hath conſiderably reduced the patient's ſtrength: in ſuch caſes, if the ſuffocations are violent, and the patient is young and vigorous, it will be adviſeable to hold pungent acids, ſuch as ſtrong vinegar or the like, under the noſe; but in tender habits, burning feathers, or applying volatile ſpirits or ſalts to the noſtrils, will be more proper. If the fit continues long, the belly and limbs ſhould be rubbed, and hot bricks or bladders of warm water applied to the ſoles of the feet; or the feet and legs ſhould, if poſſible, be placed in a warm bath.

As ſoon as the patient is recovered from the fit, a clyſter of the infuſion of camomile flowers, with a ſpoonful of common ſalt, and a few grains of aſafœtida, ſhould be adminiſtered; and in caſe of coſtiveneſs, ſmall doſes of the ſacred tincture, or Rufus's pills, with any of the fœtid gums, may be given occaſionally.

Where the ſtomach appears to be loaded with phlegm, it ſhould be diſcharged by the help of gentle emetics; but theſe ſhould be cautiouſly preſcribed, as a too frequent or violent uſe of this evacuation may weaken the ſtomach too much, and rather increaſe than relieve the hyſteric complaints.

The following medicines may be adapted to the various caſes as they occur, and may ſerve to abate the irritability of the nervous ſyſtem.

Take aſafœtida and camphire, of each one dram—of muſk, one dram and half—of liquid laudanum, thirty drops—of balſamic ſyrup, enough to make the whole into pills, of which five may be taken twice a day.

Take Rufus's pills, gum pills, and ſalt of ſteel, of each half a dram—of juniper oil, fifteen drops—of the ſyrup of orange rinds, enough to bring the ingredients to a proper conſiſtence for pills, four of which of a moderate ſize may be taken morning and night.

Take of the common bitter infuſion, one ounce and half—of chalybeat wine, half an ounce—of compound ſpirit of lavender, two ſcruples. Make a draught, to be repeated twice a day.

Take of the extract of Peruvian bark, half a dram—colcothar of vitriol, and filings of ſteel, of each twenty-five grains—of the aromatic ſpecies, ten grains—of ſimple ſyrup, as much as will make a bolus. To be taken night and morning.

Take of conſerve of ſea wormwood, one ounce—of the flowers of ſteel, three drams—of the powdered flowers of cuckow-pint, one ounce and half—of ſyrup of orange rind, as much as will make the whole into an electuary, of which the quantity of a nutmeg may be taken twice a day.

The fœtid volatile ſpirit, with an equal quantity of the paregoric elixir, may alſo be given occaſionally, in quantities from thirty to ſixty drops, in a glaſs of wine and water or any other ſuitable vehicle; or a tea-cupful of the infuſion of the bark, with fifteen or twenty drops of the elixir of vitriol, may be taken two or three times a day.

Opiates may be adminiſtered, but with caution, and generally joined with volatile and fœtid medicines; if opium diſagrees with the ſtomach, it may be uſed in clyſters, or externally, as we have already directed in treating of ſpaſmodic diſorders: ſome adviſe the uſe of caſtor with the opium, and the application of the following anti-hyſteric plaſter to the lower part of the belly.

Take of pure galbanum, half a pound—purified aſafœtida, and yellow wax, of each three ounces—of white reſin, one ounce and half. Melt together over a gentle fire, and ſtir it well.

Iſſues, ſetons, and other drains, have been found uſeful; and the chalybeat waters of the Spa, Pyrmont, Bath, Tunbridge, and Iſlington, have been recommended as extremely ſalutary, accompanied with pills of aſafœtida; and cold bathing is unqueſtionably of great importance.

But however immediate or temporary relief may be obtained from medicine, it is from regimen that we are to expect a perfect and compleat cure: exerciſe, air, a due regulation of the paſſions as far as human frailty will admit, and temperance and moderation in diet, are the grand ſpecifics in theſe, as well as in moſt other chronic complaints. If the appetite is pampered with rich and high-ſauced viands, or the ſtomach over-loaded with heavy and indigeſtive food; if the nerves are deluged with torrents of warm water, in tea or other weak and vapid fluids; or the blood is inflamed with copious draughts of ſpirituous and inflammatory liquors; it cannot be wondered that the whole frame ſhould be diſordered, and that the effects of practices ſo totally inconſiſtent with the regular performance of the animal functions, ſhould not only ſhew themſelves in the diſeaſes incident to conſtitutions ſo vitiated, but in the thouſand nameleſs complaints which conſtitute the tribe of hyſteric diſorders.

If, in the intervals of hyſteric fits, the patient ſhould be tormented with cramps in the limbs, as is ſometimes the caſe, the external uſe of opium, and bathing the affected parts in warm water, will in general give relief: when the ſpaſms are violent, and the remiſſions ſhort, it may be neceſſary to apply bliſters to the ſeat of the complaint; but this ſhould only be tried where the patient is robuſt and ſanguine; in delicate habits it will be more ſafe to rely on the antiſpaſmodic medicines above preſcribed, and warm bathing, with the application of ligatures and bandages to the parts.

In ordinary caſes the application of Hungary water, and the holding a roll of brimſtone in the hand, have been frequently found effectual to remove the complaint.

Hypochondriac diſorders are generally denominated *vapours*, or the *ſpleen*; and are in ſome circumſtances ſo ſimilar to hyſteric complaints, that the diſeaſes are frequently confounded, though they differ widely, and require in many inſtances very different treatment. Hypochondriac complaints, like moſt others in which the nerves are affected, attack the delicate and tender habit, the ſedentary and the ſtudious, the indolent and the unhappy; after the patient has ſuffered two or three returns of this diſeaſe it becomes inveterate, and is rarely ſo cured as not to be again excited by any of the cauſes which firſt occaſioned it.

Theſe complaints may be either conſtitutional or accidental; in the former caſe a dark or ſallow complexion indicates a diſpoſition to them, and they frequently occur when no particular cauſe can be eaſily aſſigned.

The accidental cauſes may be the irregularity or exceſs of any of the paſſions of the mind, and particularly thoſe which prey on the ſpirits, as grief, regret, or diſappointment: fixed attention on literary ſubjects, earneſt purſuits of diſcoveries or improvements in arts or ſciences, ſolitude, want of ſleep, or too great indulgence in lying a-bed, will in ſome inſtances produce this diſeaſe, which may alſo be occaſioned by improper diet, ſuppreſſion of uſual evacuations, whether natural or artificial, or too profuſe a diſcharge of them, the repulſion of eruptions of any kind from the ſkin, internal obſtructions, and, in general, whatever gives riſe to other nervous diſorders.

To deſcribe all the ſymptoms of the hypochondriac diſeaſe, would be to enumerate the ſigns of almoſt all the diſorders which affect the human frame; there is ſcarce a complaint made in any ſpecies of indiſpoſition, but what at ſome time occurs in that of which we now treat: the moſt general ſigns are an unconquerable inactivity of the body, affecting the mind ſo as to render the ſpirits dejected, and the thoughts deſpondent, producing horrible apprehenſions of improbable evils, and raiſing up fantaſtic ideas of unfounded fears, and dangers which have no exiſtence; and depriving the body of it's ſtrength, and the ſoul of it's vigour and firmneſs.

This diſeaſe alſo ſhews itſelf in coſtiveneſs, a ſlowneſs and difficulty of breathing, flatulencies in the firſt paſſages, a cough, pale and crude urine, and ſpaſmodic pains in the head, breaſt, and other ſeats of the nerves.

It is unneceſſary to go over again the ground we have ſo often travelled in our directions and injunctions reſpecting regimen in nervous caſes; nor will our readers require to be ſo frequently reminded, that prudence and temperance in the choice and quantity of their food and liquors, a due regard to the uſe of exerciſe, and taking it in a proper air, and a well regulated temperament of diſpoſition, are more eſſential to the cure of theſe complaints than preſcriptions of medicine: and, for a reaſon obvious to every underſtanding, regimen applies to all habits and conſtitutions; but in diſorders of various and doubtful appearance, the effect of phyſic is uncertain. If the cauſe and nature of the complaint have been truly diſcovered, medicine may contribute to remove it; but where the poſſibility of an erroneous judgment exiſts in ſo high a degree, it cannot at all times be depended on.

Yet when we deliver rules for regimen, and offer regulations in the ſeveral articles of which it is compoſed, we are aware of the difficulties we encounter. In ſome inſtances the ungovernable appetites, deſires, and inclinations of man, oppoſe themſelves to our opinion and advice, and render our beſt concerted precepts vain and uſeleſs; in other caſes circumſtances and ſituations preſent the poſſibility of their being complied with, and the unhappy patient ſees the road to health before him without the means of purſuing his journey; and in others, a complication of diſorders diſtracts both the ſufferer and his medical adviſers with fears, leſt the management which would enſure the cure of one diſeaſe, ſhould prove prejudicial or fatal in another.

Still more arduous is the taſk of confining within due bounds the turbulent paſſions of the ſoul, or bringing back and reſtraining in proper limits, wayward, wandering, or miſguided reaſon. The paroxiſms of rage will treat with contempt the warnings of the phyſician, the pangs of grief be deaf to admonition, and a perverted underſtanding will turn aſide from argument, nor liſten to the powers of conviction.

But notwithſtanding theſe various repulſes, it is our duty to return to the charge. Our buſineſs is to point out the poſſible means of preſerving and reſtoring health; and as this great art depends ſo much on mental and corporeal regimen, we muſt repeat the precept, if it ſhould not be generally attended to, or cannot be ſtrictly obſerved; lamenting the caſes of obſtinacy and incapacity, and conſoling ourſelves with the hope, that if ſome of our readers cannot, and ſome will not liſten to our advice, there are others whoſe pliant diſpoſitions, and eaſy ſituations, will enable them to derive from it all the advantage intended.

Perſons who are afflicted with hypochondriac complaints, are adviſed to a light animal food, and to the uſe of wine or ſpirits diluted with water, or Pyrmont water, as common drinks; riding is recommended as the beſt exerciſe, and where that cannot be uſed, the fleſh-bruſh, and rubbing with coarſe cloths or flannels, muſt be ſubſtituted: cold bathing is in all caſes of advantage; and change of air, or rather of objects, will aſſiſt in ſhaking off this tedious malady, and for this purpoſe journies, voyages, and public amuſements, are preſcribed.

In the early ſtages of theſe diſorders, an emetic of the milder kind will be ſerviceable, and may be repeated two or three times at proper intervals; after which gentle purges of Rufus's pills, or the ſacred tincture, will be neceſſary; and the body ſhould be kept open during the whole courſe of the diſeaſe by leſſer doſes of the ſame medicines, or by ſaline purges, according to circumſtances.

After evacuations the following preſcriptions may take place.

> Take of the ſimple bitter infuſion, one ounce and half—the aromatic tincture, and chalybeat wine, of each one dram. Make a draught, to be taken twice a day, about noon and in the middle of the afternoon.

> Or, take of the ſimple bitter infuſion, one ounce and half—of ſalt of wormwood, one ſcruple—of tincture of ſteel in ſpirit of ſea ſalt, thirty drops. Make a draught, to be taken as the foregoing.

> Or, take of the gummous pill, one dram—of Rufus's pill, one ſcruple—of ſalt of ſteel, half a ſcruple—of ſimple ſyrup, enough to make the ingredients into eighteen pills, of which three muſt be taken every night, and the uſe of them continued at leaſt two months.

> Or, take of the decoction of bark, one ounce and half—of ſimple tincture of valerian, two drams—of tincture of ſteel in ſpirits of ſea ſalt, twenty drops. Make a draught, to be taken twice or three times a day.

If the pulſe ſhould be quick, and the heat of the body indicate a diſpoſition to fever, the ſeveral preparations of ſteel ſhould be omitted, and the decoction of the bark, with the addition of a ſmall quantity of the elixir of vitriol, in the proportion of twenty drops of the latter to a tea-cupful of the former, ſhould be taken twice a day.

If pains in the ſtomach and windy complaints are accompanied with head-ache, the following medicine may be ſerviceable.

> Take of the fœtid volatile ſpirit, half an ounce—of the paregoric elixir, two drams. Mix, and take thirty or forty drops frequently in a glaſs of Pyrmont water.

If the ſymptoms ſhould become ſo violent as to produce convulſions or ſpaſms, a few drops of liquid laudanum may be taken in a glaſs of peppermint water; or the following—

> Take of aſafœtida, one ſcruple—of muſk, ſix grains—of liquid laudanum, ten drops—of ſimple ſyrup, as much as will make a bolus. To be taken as occaſion may require.

The following tincture is alſo recommended to be taken daily, and the uſe of it continued for ſeveral weeks.

> Take of the Peruvian bark powdered, two ounces—orange rind and gentian root, of each half an ounce. Infuſe the whole ſix days in a quart of proof ſpirit. Filter it through a paper, and take from one ſpoonful to two, with the mixture of an equal quantity of water, in the morning, and about ſeven in the evening.

This medicine muſt alſo be perſiſted in; and if the uſe of it is accompanied with the chalybeat waters and cold bathing, it may probably be attended with greater advantage.

CHAP. XXIII.

Of Blindneſs, and the Diſorders of the Eyes.

OF all the organs of the human body, the eye ſeems to be the moſt valuable; of all the ſenſes, the ſight appears to be the moſt uſeful: deprived of this bleſſing, we loſe at leaſt half the comforts and enjoyments of life, and are cut off from participating the choiceſt diſpenſations of Providence.

Yet notwithſtanding the high eſtimation in which we affect to hold the enjoyment of this faculty, and the energy with which all mankind join in deploring the loſs of it, either in themſelves or others; and notwithſtanding, from the peculiar delicacy with which this organ is conſtructed, it is not only ſubject to more diſeaſes than any other part of the human frame, and from the ſame circumſtances the violence of thoſe diſeaſes is irrecoverably fatal; yet are we too apt to treat lightly complaints of the eyes, and to depend for cures on noſtrums, recommended in ſuch a way as would not procure the ſmalleſt degree of credit with us in other maladies.

Nor is this the only neglect of which men are guilty with reſpect to the invaluable organs of ſight: thoſe who are born blind, or by any accident become ſo, are frequently ſuffered to languiſh through life in all the horrors of a ſtate of darkneſs, without a ſingle effort to afford relief, or even an examination into the nature of an obſtruction which might poſſibly yield to ſome remedy, application, or operation.

Diſeaſes of the eye may be occaſioned by a variety of different cauſes: long and unremitting attention to objects ſituate much above the ſight, or to ſuch as are placed ſo low as to require a conſtant inclination of the head to peruſe or ſurvey them; by fixing the ſight on ſuch objects as reflect the light too ſtrongly on it; and by reading, writing, or working a great deal, by candle-light. They may alſo ariſe from accidental cauſes, ſuch as blows, wounds, burns, or other external injuries; or from the ſmoke, vapours, or effluvia, of acrid or volatile matter. The eye may be injured by other diſeaſes, ſuch as ſmall-pox, meaſles, and the like; or diſorders in this part may be brought on by violent continued headaches; exceſſive uſe of bitter or mercurial medicines; by the ſtoppage of evacuations, and particularly thoſe of blood; by exceſſive changes from heat to cold; and by impropriety or exceſs in food and liquors.

Of *inflammations in the eyes* we have already treated; and the various other diſeaſes which affect them are to be the ſubjects of this chapter.

That diſorder with is called by the Latins *gutta ſerena*, and from the Greek *amauroſis*, is a decay or total loſs of ſight, when no other faulty appearance is diſcoverable in the eye than the enlargement of the pupil.

The *gutta ſerena* hath been diſtinguiſhed into *perfect*, *imperfect*, and *periodical* kinds: the firſt, when the loſs of ſight is total; the ſecond, when it is only ſo far impaired as that a power remains of diſtinguiſhing light from darkneſs; and the third, which attacks inſtantaneouſly, continues hours or days, and then goes off, but returns again at intervals, like fits of hyſterics or hypochondria.

The cauſes may be a palſy in the optic nerve, proceeding probably from a ſlight apoplexy; a tumor, or extraordinary fulneſs of the adjacent veſſels; a tranſlation of diſeaſed matter from ſome other part to the optic nerve; or venereal or rheumatic humours falling on the eye: this diſorder may alſo be occaſioned by hyſteric and other nervous ſymptoms; by ſeveral of the cauſes above mentioned; or by an unuſual and improper contraction or dilatation of the *irus*, or that floating part of the eye, the powers of which ſerve to admit or exclude the rays of light; or by whatever other cauſe obſtructs or intercepts the nervous influence in the eye. The periodical blindneſs, which we have deſcribed as one of the ſpecies of the gutta ſerena, may poſſibly be produced by that branch of an artery which enters the eye being diſtended, and preſſing upon the optic nerve.

Thoſe of phlegmatic or general bad habits, the aged, thoſe whoſe nerves are naturally weak or have been rendered ſo by hardſhips or exceſſes, and perſons who labour under obſtructions or irregularity of periodical or other diſcharges, are commonly the ſubjects of this diſeaſe.

If the nerve is waſted or decayed, if the patient is aged or very infirm, or if the blindneſs is the conſequence of a fever, little hope can be formed of a cure; and when the ſight of one eye goes off, that of the other ſoon follows: but if the attack is ſlight, and the ſight only impaired; if it ariſes from a compreſſion of the nerves by the fulneſs of the veſſels; if it is occaſioned by humours falling on the eye, or hath ſucceeded the meaſles or ſmall-pox; if the habit of body is robuſt, or the patient a girl whoſe periodical diſcharges have nor yet appeared; we may flatter ourſelves with the expectations of removing the diſorder. The periodical kind in moſt caſes will yield to proper management.

The ſymptoms of this diſeaſe are, that the pupil of the eye appears either larger or leſs than it's uſual ſize, and neither contracts nor dilates when expoſed to a conſiderable degree of light. It's approach is frequently accompanied with head-ache; and as that pain abates, this diſorder of the eye increaſes; though in ſome inſtances the patient becomes totally blind without any preceding indiſpoſition; and when it comes on in this way, if only one eye is affected, the defect is not perceivable unleſs the other is cloſed, and then the pupil of the diſeaſed eye will be obſerved to dilate if expoſed to a ſtrong light, when in the performance of it's natural functions it would immediately contract itſelf; and as ſoon as the ſound eye is opened again, the diſeaſed pupil returns to it's ordinary dimenſions: in ſome caſes the pupils of a new-born infant have no movement, though they appear of the natural ſize, and they continue in this ſtate months before they can ſee. When this diſorder is periodical, and proceeds from pregnancy, the ſuppreſſion of periodical evacuations, or from diſeaſes of the nerves, it is ſometimes preceded by violent head-ache, giddineſs, drowſineſs, and noiſe in the ears.

If the patient is of a ſtrong and robuſt habit, and his veſſels full of blood, it may be neceſſary to bleed freely; if the fulneſs is of the humours, purges and diuretics will be more proper, together with the application of bliſters, which muſt be placed high if they are laid on the nape of the neck, but will be more efficacious if they are applied behind the ears.

In cold phlegmatic habits, and when the cauſe is ſuſpected to be either rheumatiſm or a palſy in the optic nerve, a bliſter may be placed on the forehead; and equal quantities of the bark and valerian root powdered may be taken night and morning, in as large doſes as the ſtomach will bear, waſhing down each doſe with a tea-cupful of roſemary or ſage tea, with forty drops of the tincture of ſoot mixed in it.

The bowels muſt be kept in a laxative ſtate by ſmall quantities of calomel, given with proper doſes of Rufus's pill, or other aloetic purgatives, or by mild mercurial pills of the following compoſition.

Take the common mercurial pill, and powdered rhubarb, of each equal quantities—

ſimple ſyrup, enough to bring theſe ingredients to a proper conſiſtence for pills, which ſhould be made of a moderate ſize, and one, two, or three, taken occaſionally, ſo as to keep the body open.

The mercurial pills may be made as follows.

Take quickſilver and honey, both purified, of each two drams—of the crumb of bread, half an ounce. Grind the quickſilver and honey together till the globules diſappear, adding occaſionally a little of the ſimple ſyrup; then rub in the bread with a quantity of water, to bring the maſs to a proper conſiſtence, which will make one hundred and twelve pills.

If the cauſe of this diſorder ſhould be the ſuppreſſion of any evacuations, endeavours ſhould be uſed to reſtore them; and in all caſes iſſues, ſetons, and continued bliſters, will be ſerviceable.

In ſlight caſes benefit hath been derived from rubbing the forehead twice a day with the volatile liniment, and keeping a flannel dipped in it conſtantly to that part of the head; though a bliſter is in general more effectual.

Cupping and ſcarifying the head hath been alſo ſaid to be in ſome caſes ſucceſsful; and if the eyes are ſuppoſed to be affected by the repulſion of morbid matter from the ſkin, opening medicines and gentle perſpiratives may be uſed to advantage.

Such ſubſtances as promote ſneezing are alſo recommended, and for this purpoſe two or three grains of the reſin of guaiacum may be ſnuffed up the noſe, which will alſo excite a conſiderable diſcharge; or any of the volatile alkaline ſpirits may be uſed, being firſt properly diluted.

The ſteams of hot ſpirits of wine, or of coffee, paſſed to the diſeaſed eye through a funnel two or three times a day, have ſometimes effected a cure, accompanied with repeated purges, and a ſtrict attention to regimen.

And indeed great regard is due to the patient's food and liquors, in whatever degree he is affected by this diſorder, or whatever means are uſed to effect his recovery; the former ſhould be light and cooling, the latter, water with a toaſt, whey, table-beer, or weak wine and water: ſpirituous liquors ſhould by no means be admitted.

If all the above preſcriptions ſhould fail to remove this diſorder, a ſalivation may be tried, which has ſometimes ſucceeded in caſes which have appeared to be deſperate; though perhaps the following ſolution, continued for two or three months, may anſwer the ſame purpoſe, and it is certainly leſs dangerous and diſagreeable.

Take of the white corroſive mercury, eight grains: diſſolve in a pint of French brandy. Let the patient take a table-ſpoonful of it, night and morning, in half a pint of the decoction of ſarſaparilla.

The *albugo*, *leucoma*, or white ſpeck on the eye, may be occaſioned by violent inflammations; by abſceſſes in the cornea, or firſt coat of the eye; by the ſmall-pox or meaſles; by burns or wounds; and not unfrequently by an imprudent uſe of vitriolic collyriums, or eye-waters.

When theſe ſpecks are deeply ſeated, they are cured with difficulty; when they are produced by burns or wounds, or the uſe of vitriol, they are very ſeldom removed; and when the ſhape of the eye ſeems altered by them, the caſe is equally dangerous: the ſpecks which ſucceed inflammations ſometimes vaniſh ſpontaneouſly.

When they happen after eruptive diſeaſes or inflammations, no time ſhould be loſt in attempting to remove them; to this end bleeding, bliſtering, and purging, with diuretics and a low diet, are recommended. The variety of aſtringent and corroſive powders which have been preſcribed for this diſorder are in a great meaſure pernicious; but the fumes of coffee, of decoction of the woods, or of camphorated ſpirits of wine, may be received into the eye through a funnel with conſiderable hope of ſucceſs: this method, however, generally excites ſome degree of inflammation, which muſt be removed in the uſual way as ſpeedily as poſſible. The juice of celandine, the gall of an eel or pike, or of a partridge, or the oil of box, are alſo recommended for the removal of ſpecks on the eye; if either of theſe prove too ſharp, it may be diluted with a thin ſolution of gum dragon in water: theſe applications to the eye ſhould not be repeated oftener than once in twenty-four hours; and half an hour after either of theſe remedies hath been uſed, the eye ſhould be well waſhed with warm water, in which a few drops of brandy have been mixed. Common glaſs, very finely powdered, hath alſo been ſometimes blown into the eye through a quill, for the purpoſe of taking off theſe ſpecks; but it ſhould never be attempted where there is the leaſt degree of inflammation, nor unleſs the film be remarkably thick and tough; and even in that caſe it ſhould not be uſed above once in eight and forty hours.

A *cataract*, is when the chryſtaline humour of the eye becomes opake, or loſes it's tranſparency, ſo that the rays of light are prevented from paſſing to the inner ſurface of this organ.

At the commencement of this diſorder, the patient complains of a diminution of ſight, and on a very accurate inſpection of the eye, a whiteneſs may be diſcovered very deep within it; and as the patient loſes by ſenſible but ſlow degrees the benefit of ſight, the whiteneſs or opacity becomes gradually more and more perceivable.

In recent caſes it may not be improper to try ſuch medicines as have been preſcribed for the relief of the *gutta ſerena*; and poultices of freſh hemlock have been recommended to be applied to the eye, with a continued bliſter on the back, and a conſtant uſe of the mercurials directed in that caſe.

But no medicines have yet been diſcovered which may be relied on for the removal of this diſorder. The operations of depreſſing or extracting the chryſtaline humour have alone been found effectual to recover the ſight, obſtructed by the defect in the tranſparency of this part of the eye.

There is alſo a ſpecies of blindneſs which is called *nyctalops*, or night blindneſs, in which the patient's ſight gradually goes off towards the approach of night, and he remains blind till the morning, when the ſight returns and continues all day.

This is conſidered as an intermitting diſorder, and may be alſo termed a periodical blindneſs; the free and continued uſe of the Peruvian bark generally affords relief in theſe caſes.

Bloodſhot-eyes are in moſt inſtances occaſioned by external injuries, ſuch as blows or bruiſes, or by violent bodily exertions, and ſtraining in coughing, or vomiting, lifting great weights, or the like; and the appearance is at firſt in ſpots of a lively red colour, which afterwards become livid or blackiſh.

When this diſorder is violent and obſtinate, bleeding may be neceſſary; but it may in moſt caſes be removed by fomenting the eyes with the infuſion or decoction of elder flowers and roſes, or by poultices of red roſes, boiled in milk and laid over the eye.

Weeping eyes, or thoſe which are troubled with a perpetual defluxion of watery humours, occaſioned by a weakneſs of the glands in thoſe organs, or by a particular relaxation, may find relief in the vitriolic collyrium, applied with caution; or by the uſe of Hungary water or other ſpirits, diluted ſo as not to bring on inflammation, or to occaſion violent pain: bliſters, opening medicines, and bathing the extremities, may alſo prove uſeful, by drawing off and diſcharging the humours which offend the eye.

Shortneſs of ſight, and *diſtant viſion*, can hardly be conſidered as diſorders, proceeding generally from original defects in the ſtructure of the eye, and therefore not admitting any aſſiſtance from medicine or ſkill, except where thoſe complaints have taken place ſuddenly or come on gradually after any acute diſeaſe, or in conſequence of debility of conſtitution; in which caſes they may be conſidered as nervous diſorders, and treated accordingly.

Squinting may be a habit contracted by imitating or mocking others; or it may be occaſioned by viewing or endeavouring to view many pleaſing objects at once, or by placing an infant ſo that the light of the window, candle, or fire, may fall obliquely on it's eyes; it may alſo proceed from ſome fault or defect in the conformation of theſe organs, or of ſome particular parts of them; the weakneſs of one eye may occaſion this defect in the other; the muſcles may be relaxed or contracted in an extraordinary degree; or it may be produced by a tumor in the orbit or ſocket of the eye, by an adheſion of the eye to any part of the eyelid, or from ſpaſms, apoplexies, palſies, or epilepſies.

Thoſe whoſe ſquinting has been brought on by accident after they are grown up, ſee the objects they look at double, which is not the caſe when the defect is in the conſtruction of the eye.

Attempts have been made to remove this defect in children, by obliging them to look at their faces in a looking-glaſs for a quarter of an hour at a time every night and morning, waſhing the eyes with diluted Hungary water, and bathing the temples and forehead three times a day with water to ſtrengthen the muſcles; but this defect is much more eaſily prevented than cured, and it behoves parents to be extremely careful not to permit their children to converſe with thoſe who ſquint, as there is hardly a habit more apt to be acquired if they have familiar communication with perſons whoſe eyes are diſtorted either by cuſtom or infirmity.

CHAP. XXIV.

Of Deafneſs, and Diſorders affecting the Ear.

IF the enjoyment of ſight is one of the greateſt of earthly bleſſings, that of hearing is next in importance; he who is deprived of this faculty, loſes a principal ſhare of the benefits of ſociety, being cut off from that communication which conſtitutes ſo large a portion of human happineſs, and being condemned to eternal ſolitude in the buſieſt ſcenes of the univerſe.

Deafneſs, or *a defect in hearing*, may be occaſioned by external wounds or injuries; by wax or any foreign matter accidentally ſtopping the external ear; by the membrane of the drum of the ear being ruptured or relaxed; by palſy, or extraordinary preſſure on the auditory nerve; by violent noiſe; by a defluxion of humours on that part, or by too great dryneſs; or by cold, inflammation, or abſceſs.

Deafneſs may alſo ariſe from a defect in the original conformation of the ear, or may be produced by weakneſs of the nerves, or by the gradual and univerſal decay uſually attendant on old age.

When deafneſs proceeds from the laſt mentioned cauſe, or from external injuries, there can be no expectation of cure; and when the defect is in the ſtructure, it is equally beyond the reach of art.

But when it is cauſed by hardened wax, or any accidental ſtoppage, the former may be relieved by frequent injections of warm water, or milk and water, a little ſweet oil having been previouſly dropped on the wax to ſoften it; the latter muſt be carefully removed by proper inſtruments.

Hardened wax may alſo be diſcharged by ſoftening it with the following drops, and afterwards ſyringing the ear with a decoction of the flowers of ſage and roſemary.

> Take of the oil of ſweet almonds, two drams —compound ſpirit of lavender, and tincture of caſtor, of each one dram. Shake them well together.

After the wax has been brought off, a little wool, moiſtened with the ſame drops, and worn for ſome time in the ear, will prevent it from hardening again.

The following preſcription hath alſo been recommended for the ſame purpoſe.

> Take the oil of ſweet almonds, and opodeldoc, or the ſaponaceous liniment, of each two drams. Mix them well together. Drop a ſmall quantity into the diſeaſed ear at bed-time, and ſtop it with a little wool or cotton.

If the deafneſs is occaſioned by a relaxation of the membrane, a little brandy or ſpirit of roſemary, warmed, may be now and then dropped into the ear; and ſuch medicines as excite ſneezing have ſometimes produced very good effects, when the cauſe of the complaint hath been undiſcoverable.

When it ariſes from a cold in the head, a flannel night-cap is recommended; the patient ſhould alſo be particularly careful not to get wet in his feet, to keep thoſe extremities warm by woollen ſtockings, and to bathe them frequently in warm water, and eſpecially at going to bed: mild purges are alſo of great uſe, where there is any appearance of inflammation.

If the deafneſs is occaſioned by a defluxion of humours, the following injection may be uſed night and morning.

> Take of the extract of lead, twenty-five drops —of camphorated ſpirits of wine, fifty drops —of water, half a pint. Shake the whole well together before it is uſed.

But in theſe caſes, iſſues, perpetual bliſters, and other occaſional drains, made as near the part as convenient, will in general anſwer the purpoſe more effectually, by drawing off the redundant moiſture.

A bit of fat bacon, put into the ear, is ſaid to anſwer the purpoſes of ſoftening the wax; but care ſhould be taken that it is not thruſt too far in, nor preſſed too tight; in either of which caſes, it may probably do more harm than good.

Electricity hath been mentioned as a cure for confirmed deafneſs; if this is tried, the ſhock ſhould be gentle, and received as near the ear as is conſiſtent with ſafety.

A variety of other preſcriptions for this complaint may be found, as well in the writings of phyſicians, as in the mouths of nurſes and other notable people; but we are of opinion that the applications to this delicate organ ſhould be made as ſeldom as poſſible, and with the utmoſt caution. For the ſatisfaction of ſuch as wiſh to know what has been uſually done in ſuch caſes, we ſubjoin the following, though we rather adviſe warmth than the very beſt of them, as we apprehend deafneſs of any kind more likely to be removed by this means than any medical help that can poſſibly be given.

> Take twenty drops of the gall of an eel, the like quantity of ſpirits of wine, and two drams of water. Mix well together, and drop three or four drops into the diſeaſed ear at bed time, ſtopping it well with wool or cotton, and keeping the head warm.

Put a grain or two of muſk into the ear, with cotton or wool.

Put a ſmall quantity of ſalt into the ear, or drop into it half a tea-ſpoonful of ſea water, or a ſolution of common ſalt in water.

Drop a few drops of the juice of ground-ivy into the ear, or three or four drops of the juice of an onion, at bed-time, ſtopping the ear.

Skin a clove of garlick, dip it in honey, and put it into the ear at bed-time, ſtopping it with black wool. Lie with that ear uppermoſt: the next night make the ſame application to the other ear, and continue it to each alternately for a week.

Next in order to the ſenſes of ſeeing and hearing, are thoſe of taſte and ſmell; that of the touch is the laſt, though it appears to be nearly of equal importance with the other two.

A depraved or vitiated *taſte*, and a defective *ſmell*, are ſo generally occaſioned by luxury, exceſs, or ill habits and cuſtoms, that they can no more be deemed diſeaſes, than the giddineſs occaſioned by exceſſive drinking, or the fulneſs of ſtomach which is the natural conſequence of gluttony.

High and ſeaſoned diſhes, aromatics, ſpices, and ſtrong liquors, will effectually ſpoil the taſte; and want of cleanlineſs about the teeth, gums, and indeed the whole mouth, will at leaſt occaſion a temporary ſuſpenſion of this diſtinguiſhing faculty; diſeaſes of various kinds produce nauſeous and diſagreeable taſtes in the mouth, but they chiefly ariſe from acid or acrid humours in the ſtomach, and when theſe are corrected the conſequence will be no longer troubleſome.

Injuries received in the nervous parts of the tongue and palate may totally deſtroy the powers of taſte; and pimples, warts, or other eruptions, may deprive the little eminences, which are diſcovered like a roughneſs on the fartheſt part of the tongue, and which are the medium of taſte, of their nice and delicate ſenſibility. And defluxions, occaſioned by violent colds, may likewiſe contribute to blunt thoſe acute ſenſations, which occaſion the little prominences that conſtitute this apparent roughneſs, to meet and receive whatever is offered to the taſte.

It has been ſaid that the taſte generally determines what aliment is ſalutary, and that for the moſt part whatever offends the taſte is injurious to the ſtomach: but ſhould this opinion be admitted in the extent, we apprehend it would be extremely difficult to determine that any ſingle article of food is wholeſome, or the contrary; as it is well known that the ſame flavour does not pleaſe or diſpleaſe all perſons alike, or even the ſame perſons at different times.

The taſte which is depraved by high feeding or exceſs, may be reſtored by the uſe of a plain diet, and the obſervance of moderation and temperance. A bad taſte, ariſing from a diſordered ſtomach, as we have already obſerved, will vaniſh when the cauſe is removed: when the nerves which furniſh the organs of taſte are weakened or relaxed, ſtimulatives, ſuch as muſtard or horſe-radiſh, will give relief; but where thoſe nerves are deſtroyed, or have received material injury from wounds or the like, this ſenſe is in all probability irrecoverably loſt.

The ſenſe of *ſmelling* may alſo be materially affected by the continual application of fragrant or volatile odours; ſnuff is deſtructive of this faculty, and thoſe who frequently uſe a ſmelling-bottle, deſtroy, by degrees, the ſenſibility of the olfactory nerves.

The ſmell may alſo be diminiſhed by diſorders affecting the membrane which lines the noſtrils, and by which the odorous effluvia contained in the air, and attracted through the noſtrils, are communicated to the olfactory nerves; by a defect in the ſtructure of the brain, where theſe nerves originate, or of the ſpungy bones of the upper jaw; but the loſs of ſmell much more frequently happens from accidental and acquired, than from natural cauſes.

Defluxions, occaſioned by colds or other diſorders of the head, injure the ſenſe of ſmelling whilſt they continue; but being removed, this faculty is ſpeedily reſtored: when the mucus is too thick, or dries up in the noſtrils, the ſmell will be obſtructed; but this complaint may be relieved by ſuch medicines as excite ſneezing, or by receiving acid ſteams into the mouth and noſtrils.

Tumors in the noſe are ſometimes troubleſome and painful; poultices applied without, and the ſteam of warm water received into the noſtril, will accelerate the ſuppuration; the ulcers may be dreſſed with any emollient ointment, which muſt be melted and ſnuffed up the noſtrils, if the part affected is beyond the reach of ordinary application: where theſe ulcers are of the venereal kind, mercurials will be neceſſary, and the ſolution of white corroſive mercury in brandy, as directed in the gutta ſerena, may be uſed both as an internal medicine, and to waſh the ſores.

If the nerves on which the organs of ſmell depend appear to be affected with weakneſs or inactivity, they may be ſtimulated by ſmelling to muſtard, horſe-radiſh, or volatile ſalts; or ſneezing may be excited by ſnuffs, or by the ſolution of vitriol, which we have heretofore preſcribed for that purpoſe.

The ſenſe of *touching* is that perception which affects the mind when any external body is applied to the ſkin, but more eſpecially at the ends of the fingers, which are furniſhed with nerves by which the tangible qualities of things are more accurately diſtinguiſhed than by other parts of the body.

This ſenſe may be impaired by obſtructions of the nervous influence, and the loſs or diminution of it may be conſidered as a ſpecies of palſy or apoplexy, and ſhould be treated accordingly. A torpor, numbneſs, or inſenſibility of touch, in other parts of the body, may be relieved by ſuch medicines and applications as have been preſcribed in other nervous caſes affecting the members of the body externally.

CHAP. XXV.

Of Melancholy, or Melancholy Madneſs.

MELANCHOLY is a tedious and obſtinate diſtemper, in which the patient continues delirious without a fever, his mind being alienated from that regularity and firmneſs, which enabled him to enjoy the comforts and perform the duties of life, and his thoughts fixed almoſt continually upon one and the ſame idea.

The cauſes of *melancholy* may be intenſe application of the mind to any particular object; violent paſſions of the mind, whether excited by circumſtances of grief or joy, or produced by love, reſentment, pride, or diſappointment; and gloomy or deſponding thoughts, or miſconceived ideas in religious matters; than which nothing is ſo likely to make ſtrong and laſting impreſſions. This diſorder may alſo be occaſioned by exceſſive labour or violent exerciſe, eſpecially under an expoſure to the ſun, or in a dry, hot, and ſultry air; by exceſs in the indulgence of venereal pleaſures; by extremes of heat and cold, or ſudden changes from the one to the other; by a ſedentary, inactive, and ſolitary life; by hard, dry, and indigeſtive food, particularly ſuch animal fleſh as is ſalted and dried in the ſmoke; bread and other preparations of meal not properly fermented, and crude and unripe fruits; by large draughts of weak or watery liquors, or by an improper quantity of ſpirits and other ſtrong drinks; by medicines of too aſtringent quality, or operating too violently; or by ſlow, ſoporiferous, and ſtupifying poiſons. This diſorder may alſo be produced by the ſuppreſſion or diminution of cuſtomary evacuations of any kind; by exceſſive cold or wet in the extremities, driving too great a quantity of blood into the brain; or by the brain itſelf becoming too dry, or the integuments hard or callous: it may alſo ſucceed fevers and other acute diſorders, or ſuch eruptive diſeaſes as have been incautiouſly and imprudently repelled.

The ſymptoms of approaching melancholy, are want of ſleep, unuſual timidity, and ſtrange apprehenſions of danger; the belly is bound, the urine pale, and diſcharged in ſmall quantities, and the bowels and ſtomach troubled with wind; the complexion alters, firſt growing pale, and then turning yellow, ſallow, brown, and even livid, and in ſome inſtances ſpread with ſpots of different appearances; the pulſe becomes languid, the breathing ſlow and difficult, the circulation through the finer veſſels is impaired, ſo that the ſecretions are diminiſhed, the blood thickened, and the diſcharge of the humours leſſened; the appetite fails, and the patient loſes his fleſh, and feels a decay of ſtrength.

The perverſion of the mind betrays itſelf in fretfulneſs, deſire of ſolitude, and impatience of diſturbance; the paſſions are ſuddenly excited, and the ſmalleſt diſappointments produce ſourneſs, anger, or vexation; the inclinations are fickle, and perpetually varying, ſo that what the patient earneſtly enquires after one moment, he totally diſregards the next; and thoſe things which were moſt pleaſing to him in health, are now the moſt diſagreeable: yet, amidſt all theſe inconſiſtencies, and with an averſion to motion and exerciſe which appears to be almoſt unconquerable, he follows ſome certain object with unremitting and laborious conſtancy; and this aſſiduity is ſometimes exerted in the imaginary purſuits of knowledge and ſcience, and ſometimes in the preſervation of his perſon, which he at one time apprehends to be metamorphoſed into a beaſt of the chace actually worried by hounds; and at another believes it is converted to a tea-pot or ſome other brittle veſſel, which runs the momentary hazard of being daſhed in a thouſand pieces.

If the diſorder is hereditary, or is occaſioned by diſappointed love, ambition, or other inquietude of mind, it is removed with extreme difficulty; when it proceeds from accidental bodily infirmities, ſuch as ſuppreſſion of evacuations, colds, fevers, or the like, a cure may be expected: caſual diſcharges of blood from the noſe or hæmorrhoidal veſſels, and the return of obſtructed periodical evacuations, in ſome caſes give relief; and a cure is ſometimes obtained unexpectedly by the breaking out of eruptions on the ſkin, or boils on different parts of the body; and in ſome inſtances the diſeaſe is carried off by a diarrhœa, after it has continued ſo long as to bring the patient's life into danger.

The food ſhould be light and nouriſhing; all thoſe kinds which we have before deſcribed, as having a tendency to promote this diſeaſe, being carefully avoided; the drink may be whey, water, or teas of herbs ſweetened with honey, and thin wort or ſmall-beer before it has undergone fermentation; all ripe fruits may be eaten freely, and the juices of them mixed with water, and ſweetened with honey, will make an agreeable and wholeſome drink: the patient ſhould abſtain from wine and ſpirits of every kind, and from all food and liquors, in the compoſition of which, ſpices and other matters of a heating quality are included.

Conſtant but moderate exerciſe will very much aſſiſt the cure; riding or walking, as much as the patient can well bear without incurring great fatigue, will not only remove obſtructions, but promote that diſcharge by perſpiration which is in this caſe ſo neceſſary and ſalutary: ſome adviſe digging in a garden; but we apprehend this is an employment, which not affording variety or change of objects, is unfit for perſons of melancholy diſpoſitions, more eſpecially as it tends to indulge the propenſity to ſolitude which ſo generally attends this diſeaſe.

Indeed our firſt and chief attention muſt be paid to the patient's mind, which muſt be ſoothed and quieted by every ſpecies of indulgence; it is not enough that neither his inclinations or opinions muſt be oppoſed, but the former muſt be gratified as far as poſſible, and every thing that is beyond our reach, or improper, promiſed at ſome future period. It is in vain to combat the abſurd propoſitions of the melancholy patient with reaſon or argument; they ſhould therefore be always admitted till an opportunity offers of practical conviction: the patient who conceived his legs were glaſs, was cured of this imagination and his diſorder, by a blow on the legs from an impatient and impertinent ſervant; and the artiſt, who believed his bones were all ſoftened to wax, got rid of his opinion and the diſeaſe, by the ſagacity of his phyſician, who humoured his conceit, and promiſed to reſtore them to hardneſs in a certain number of days, in the courſe of which he gradually admitted the patient to the uſe of his limbs, under an idea that the cure proceeded thus progreſſively.

When the the patient's mind is ſoothed or flattered into any degree of attention, amuſements and diverſions muſt be thrown in his way as if by accident; he may be decoyed to a public place under the pretence of finding ſome object of which his mind is in ſearch, or induced to take a journey to gratify ſome imaginary purſuit: but all his amuſements muſt be perpetually varied; whatever the mind in this ſtate dwells long upon will feed the diſeaſe, and even muſic, with all it's ſoothing powers and charms, may be continued ſo long, or repeated ſo often, as to nouriſh that melancholy which it is expected to remove.

The patient ſhould, if poſſible, breathe a light and temperate air, and for this purpoſe a removal to the continent hath been recommended; and where circumſtances admit of this expedient, the voyage and variety of objects may poſſibly contribute as much to the cure as the warmth or temperature of the climate.

Sleep is of great importance, and when it can be procured without medicine, the patient may be indulged in it, with great hope that the ſuſpenſion of thoſe anxious meditations which ſo much perplex his waking thoughts, and the opportunity given for all the juices of the body to paſs eaſily through the veſſels and recruit the waſted humours, will produce happy effects.

Warm bathing, very frequently repeated, and drains of all kinds, but particularly a ſeton in the back, will be of conſiderable uſe; if bliſters are applied, they ſhould be continued, and the diſcharge promoted by proper dreſſings; and iſſues may be kept open with little balls or peas of the root of orrice, and covered with plaſters of the mild bliſtering ointment.

If the patient is young and of a robuſt and ſanguine habit, the firſt ſtep to be taken towards a cure is bleeding; and this operation muſt be repeated, and ſuch quantities of blood taken away, as the patient's ſtrength and pulſe direct.

Clyſters of the emollient kind may alſo be frequently adminiſtered, and the body muſt be kept open by manna, cream of tartar, rhubarb, or the following mixture.

Take of the infuſion of ſenna, three ounces
—of ſoluble tartar, two drams. Mix, and give three table-ſpoonfuls occaſionally.

Emetics are alſo of great ſervice, but the efficacy and operation of them will depend on their being rather ſtronger than uſual.

After proper drains have been made, and the above evacuations have taken place, any of the following medicines may be tried; but it will be right to continue ſuch of them as are thought ſuitable to the caſe for ſome time, before the hopes of ſucceſs are given up, as neither of them can be expected to act immediately in the removal of this obſtinate malady.

Take of muſk, one ſcruple—aſafœtida and camphire, of each two ſcruples—of liquid laudanum, thirty drops—of ſimple ſyrup, as much as will make theſe ingredients into twenty pills, of which five may be taken morning and night, with the following draught.

Take of water, one ounce and half—of diuretic ſalt, half a dram—of balſamic ſyrup, one dram. Make a draught, to be repeated as above; and to that which is taken at night add from fifteen to twenty drops of liquid laudanum.

Or, take of gum ſagapen, one ſcruple—of tincture of myrrh, enough to make it into three pills. To be taken every night, and continued a month, drinking after it one of the above draughts. Five grains of rhubarb, or two of aloes, may be added to the pills occaſionally, if the patient ſhould be coſtive.

The ſweet ſpirit of nitre may be given in the patient's common drink; or purified nitre to the quantity of one dram and half, or two drams in twenty-four hours, may be given in three or four different doſes, in any way that it can be beſt got down; or nitre and camphire may be taken in the following form.

Take of camphire, from eight grains to twelve, according to circumſtances—of nitre, from one ſcruple to half a dram. Make a bolus with ſimple ſyrup, to be taken twice a day.

Or if this medicine offends the ſtomach—

Take of nitre, from one ſcruple to half a dram—aſafœtida and Ruſſian caſtor, of each one ſcruple—of ſimple ſyrup, enough to make a bolus. To be taken as above.

Diſtilled vinegar is ſaid to be an excellent remedy in melancholy caſes, and is adviſed to be mixed with the patient's common drinks, in ſuch proportions as that an ounce or an ounce and half may be taken every twenty-four hours.

CHAP. XXVI.

Of Madneſs.

OF *delirium*, *phrenzy*, and *ſymptomatic madneſs*, we have already treated under the various diſeaſes to which they are ſeverally incident. The *madneſs* which we are now to conſider, is a chronic diſeaſe, and is frequently the melancholy which we have laſt deſcribed, increaſed to ſuch a height as to produce that ſpecies of inſanity which is called a *mania*, or raving madneſs.

This diſeaſe differs only in the degree from melancholy, of which it is generally the offspring; and ariſing from the ſame cauſes, is denoted by nearly the ſame ſymptoms in a ſtate of aggravation.

The preceding ſigns are in general an inflammatory appearance or redneſs in the eyes; a trembling of the eye-lids; a total change of behaviour and diſpoſition; a pride, which diſcovers itſelf in the voice, geſture, and countenance, and in boaſting ſpeeches of accumulated wealth, rank, or power; in a fixed and uncommon hatred to particular perſons, and frequently to near relations, and thoſe who have been before higheſt in the patient's eſteem; broken interrupted ſleep, and ſometimes a total diſcontinuance of reſt; a violent head-ache, unuſual quickneſs of hearing, a noiſe or ringing in the ears, an immenſe degree of ſtrength in the muſcles, a capacity of bearing intenſe cold: in women an apparent accumulation of blood in the breaſts; a wonderful endurance of hunger and pain; dreadful imaginations, with ſtrange geſticulations; perpetual talking without the leaſt coherence; and cries and howlings like thoſe of dogs, wolves, or other wild beaſts.

In the height of this dreadful diſeaſe, the patients ſometimes wander far from their habitations, and ſhunning the ſight of men, betake themſelves to ſolitude, and refuſe to hold any converſation with mankind, or even to anſwer queſtions; ſome tear and mangle their bodies, and others imagine they perceive red images before their eyes, and think themſelves ſtruck with lightning.

It has been obſerved, that madneſs ſometimes remits for a conſiderable time, but returns periodically about the times it firſt appeared; and that thoſe raving fits, which ſeem by their periodical returns to be governed by the moon, are generally accompanied with epileptic ſymptoms.

After all other remedies have been tried in vain, this diſtemper hath been relieved by other diſorders attended with large evacuations, or in which the ſecretions are conſiderable; as varices, or preternatural diſtenſion of parts of the veins, ſpontaneous fluxes of blood, piles, dyſenteries, dropſies, and even by the attacks of agues where the ſweats have been long and profuſe.

For the cure of this degree of madneſs, the evacuations preſcribed in caſes of melancholy are not only neceſſary, but require to be increaſed in frequency and violence of operation: bleeding, emetics, ſuch purges as have been directed in that diſeaſe, and diuretics, warm baths, and drains, with the liberal uſe of camphire, muſk, and nitre, and after the evacuations opiates, are recommended as the probable means of cure.

The antimonial wine, or emetic tartar, is generally given in theſe caſes to excite vomiting; but ſhould theſe fail of ſucceſs, which ſometimes happens, from one table-ſpoonful to two of the juice of aſſarabacca, or groundſel, may be given; the flowers of antimony have alſo been celebrated as a ſpecific.

Bathing in cold water, pouring water on the head, and covering it with wet cloths, have been recommended, and even in deſperate caſes immerſing the patient in the ſea, and keeping him as long under water as is conſiſtent with the ſafety of his life, is ſaid to have been in ſome inſtances ſucceſsfully tried.

If a low and diluting diet is neceſſary, when the patient labours under that kind of inſanity which ſhews itſelf in melancholy, it muſt be ſtill more eſſential in that degree of the diſorder in which the patient raves and is furious; indeed, the ſame regimen in all reſpects, except an increaſed ſtrictneſs, will be required in the ſtate of this diſeaſe of which we now treat.

It may be neceſſary to obſerve, that every kind of madneſs being attended with a decreaſed perſpiration, the cuſtom of confining theſe patients in cloſe apartments augments this obſtruction; they ſhould therefore, in all poſſible caſes, be left at liberty to uſe ſuch exerciſe as may promote a diſcharge ſo very eſſential to the abatement of the violent ſymptoms, and to the hope or proſpect of a cure.

Nor can we omit to remark, that ſeverity in beating, chaining, and terrifying, is ſeldom neceſſary, and never in any degree of violence: madneſs is always accompanied with timidity, and after the moſt frantic have felt a few inſtances of ſmart, rather than ſeverity, they may in general be very eaſily governed.

There is alſo another ſpecies of inſanity, accompanied with leſs violent ſymptoms, which uſually comes on after the body has been much weakened and exhauſted by autumnal intermitting fevers, by exceſſive and repeated bleedings, or by violent diſcharges from the bowels.

In theſe caſes evacuations are ſaid to be pernicious, and the hopes of cure are placed in the uſe of a nouriſhing reſtorative diet, with the occaſional adminiſtration of cordial and corroborant medicines.

CHAP. XXVII.

Of the Bites of Dogs and other Animals in a State of Madneſs; and of the Hydrophobia, or Dread of Water.

THE *hydrophobia* has been held to be a ſymptom of the bite of mad animals, and that this kind of madneſs belongs properly to the canine ſpecies, which are deſcribed to be dogs, foxes, and wolves; but it does not always attend the bites of theſe animals, nor is it peculiar to thoſe of the canine race, as we ſhall prove in the ſequel of this chapter, unleſs it ſhould be taken for granted, that whenever it appears after the bites of other animals, it has been inflicted on them by thoſe of the dog kind.

This country not being infeſted with wolves, and no inſtances of miſchief done by mad foxes having come to our knowledge, we ſhall confine ourſelves at preſent to that diſeaſe which is occaſioned by the bite of a mad dog.

The hydrophobia is allowed to be a nervous diſorder, though it is accompanied with inflammatory ſymptoms; it is generally diſtinguiſhed into the ſilent or dumb, and raving madneſs; and is ſaid to take either appearance from the ſtate of the animal from which the infection was received; though inſtances are related, in which it hath aſſumed both at intervals, or periodically.

The principal ſeat of this diſorder ſeems to be either the ſtomach, or the adjacent parts, though ſome are of opinion that it is in the *par vagum*, or thoſe nerves which are interſperſed in the ſtomach, as moſt of the ſymptoms appear about this part of the body.

It has been ſaid that in order to communicate the infection, a wound is no more neceſſary than in the ſmall-pox, and that the ſmalleſt quantity of ſaliva, either freſh or dry, produces this diſeaſe: the infection may, it is ſaid, lay dormant for many months, but it ſeems to be the more general opinion that it commonly appears in three or four weeks; and if no ſymptoms of the diſeaſe are manifeſted in ſix weeks, the patient need not be under the leaſt apprehenſion of any ill conſequences.

The material cauſe of this diſorder ſeems to be an irritation of thoſe particular nerves which are the ſeat of the complaint; and it has been obſerved, that the nearer the bite is to the ſalivary glands, the ſooner the ſymptoms appear.

The ſigns of madneſs in a dog are deſcribed as follows: he becomes ſolitary and dull, avoids thoſe with whom he is accuſtomed to be familiar, and his companions of his own ſpecies, and endeavours to hide himſelf; he ſeldom barks, but makes a kind of howling or murmuring noiſe, refuſing at the ſame time all kinds of meat and drink; he ſeems particularly enraged, and flies at ſtrangers, but in this firſt ſtage appears to recollect and regard his maſter; he hangs down his head, ears, and tail, and nods when he walks as if he was overpowered with ſleep; and in this ſtate of the diſeaſe, though his bite is dangerous, it is leſs ſo than afterwards. As the diſorder increaſes, the dog begins to pant, he breathes ſhort and hard, hangs his tongue out of his mouth, from which he emits great quantities of froth, and keeps it conſtantly open; ſometimes he moves ſlowly, as if he was half aſleep, and then of a ſudden runs violently, though not always directly forward, according to the common opinion; at length he forgets his maſter; his eyes look languid, dull, red, and watery; his tongue is of a livid or lead colour; he is of a ſudden exhauſted, becomes faint and weak, and falls down; then riſes again, flies at every thing, and grows furiouſly mad: this ſtage ſeldom continues above thirty hours, during which time his bite is ſaid to be incurable. A few hours before his death, he becomes ſilent and ſtill, and at laſt generally dies in convulſions.

To theſe ſymptoms may be added the following, which are conſidered as infallible proofs of the animal's madneſs: all other dogs will avoid the dog which is mad, or approaching to madneſs, and run from him with horror; they will alſo refuſe any piece of raw fleſh which the diſtempered dog hath touched with his tongue or mouth; the tone of the dog's voice when he barks is hoarſe and hollow; and, if he is confined in that ſpecies of this diſeaſe, which, though very improperly, is termed the *dumb madneſs*, he barks inceſſantly for a day or two.

Such are the general ſigns of madneſs in theſe animals, the original cauſes of which have never yet been diſcovered, or even enquired after; though, if we may venture to riſque an opinion on this ſubject, we ſhall attribute it to thoſe acts of cruelty ſo frequently and wantonly committed on a faithful, uſeful, and inoffenſive animal, whoſe ſagacity, docility, and affection to the human race, ſhould protect him from outrages which are too often practiſed, even in the ſtreets of the metropolis, to the diſgrace of the perpetrators, the diſhonour of civil policy, and the diſguſt and horror of every being who is not totally diveſted of the principles of tenderneſs and humanity.

From the barbarous treatment to which theſe animals are too often expoſed, it is eaſy to conceive madneſs may ſometimes proceed; but it is ſtill more frequently productive of conſequences, which, though not actually of a nature altogether ſo fatal, are yet of importance enough to deſtroy the peace, and diſturb the quiet of individuals; and if they do not occaſion the dreaded malady, may give birth to others, which, though not ſo immediately alarming, may in the event prove diſtreſſing and dangerous.

When the wretched creature has eſcaped the fury of his original tormentors, worried, affrighted, bruiſed, wounded, and perhaps mutilated, his appearance betrays many of the ſymptoms which we have marked as the ſigns of madneſs: a dog in this condition attracts the notice, but ſeldom engages the pity, of thoſe who meet him in his flight; the cry of a mad dog is given out, and he undergoes a ſecond perſecution, which ends but with his life; aſſaulted on all ſides, he attacks his aſſailants in his turn, or faſtens on the firſt paſſenger that comes within his reach. The dog is deſtroyed, ſo that no obſervations can be made on his condition; the wounded perſon is ſaid to have received the bite of a mad dog, undergoes all the horrors of apprehenſion, and all the operations of medicine; and in conſequence of a received, though very miſtaken idea, that the diſeaſe may appear at any diſtant period, paſſes through his life in a ſtate of uneaſineſs, which may in all probability contribute to ſhorten it: and we had once an opportunity of obſerving the diſtreſs into which a circumſtance of this kind plunged a whole family, who had taken a journey of fifty miles to bring a deſerving young woman to be dipped in ſalt water at a village on the Severn, whoſe apprehenſions of this diſeaſe had ariſen from a bite received in the finger from a hog which ſhe was feeding, and which had been ſome months before bitten by a dog ſuppoſed to be mad; for, on enquiry, it appeared, that this animal had been killed immediately after he had wounded the hog, and the latter being alſo deſtroyed the moment he had injured the young woman, no opportunity offered for diſcovering whether the dog had ever been infected with madneſs, or whether the outrage committed by the other animal was occaſioned by hunger or diſtemper.

That the caſe we have repreſented is by no means uncommon, will be univerſally admitted; how much, then, is it to be lamented, that an evil pregnant with ſo much miſchief ſhould paſs unheeded, and the application of remedies be deemed either unworthy the attention of the legiſlature, or beneath the dignity of law.

When this diſorder hath unhappily been communicated to any of the human ſpecies, though ſome variations may be obſerved in particular caſes, the general ſymptoms are a ſlight pain in the wound, ſometimes accompanied with itching, but always reſembling rheumatiſm, extending alſo to the neighbouring parts, and at length paſſing from the extremities to the bowels and other inteſtines; the ſcar, if there hath been a wound, begins to ſwell, becomes inflamed, and at laſt diſcharges a thin watery humour, and this is conſidered as an invariable mark of an approaching hydrophobia; there are alſo other pains of the ſame kind, which are quick, ſhifting, and convulſive, and affect the patient in the neck, joints, and other parts of the body: ſometimes a dulneſs and ſenſe of pain ſeizes at once the head, neck, breaſt, belly, and even ſeems to run through the back-bone; and, as the diſorder increaſes, the patient complains that the ſame kind of pain ſhoots from the arms towards the breaſt and heart.

Beſides theſe ſymptoms, a wearineſs, pain in the head, and giddineſs, come on; the patient grows gloomy, murmurs, and is forgetful and drowſy; ſometimes his mind ſeems diſordered, he is ſeized with fits of unprovoked anger, his reſt is diſturbed with frightful dreams, he awakes agitated and confuſed, and convulſions immediately follow; his hearing is impaired, the eyes red and watery, the aſpect melancholy, the face pale or ſallow, and the features ſhrunk or contracted; a ſweat breaks out about the temples, and a dryneſs about the entrance of the throat; and a foul tongue and fœtid breath are accompanied with an unuſual diſcharge of ſaliva or ſpittle.

From the beginning of the complaints there is a peculiar weight and ſtricture on the breaſt, a difficulty, and as it were ſtruggling for breath, deep ſighs, a nauſea, and diſpoſition to vomit; and this oppreſſion of the breaſt is one of the conſtant ſymptoms of this diſorder, beginning, increaſing, and ending with it.

We have now deſcribed the firſt ſtage of this deplorable diſeaſe, the continuance of which varies with different patients: as theſe ſymptoms are aggravated, the ſecond ſtage advances, in which a fever ſometimes comes on, attended with momentary horrors; but in ſome inſtances this fever is mild, and in others it does not occur; the incapability of ſleeping becomes continual, the diſturbance of the mind increaſes, a delirium approaches, with an averſion to all fluids and poliſhed bodies. The hydrophobia now draws on, and the preſages of that dreadful ſymptom are, a conſtriction of the gullet, and a difficulty of ſwallowing: hitherto liquids are received freely, but they are ſoon after refuſed, and this ſymptom is augmented ſo viſibly, that the patient is ſeized with horror at the ſight of any liquid, and an attempt to drink produces ſpaſms, which are followed by anxiety and loſs of the ſenſes; the moment the ſurface of the liquor is touched, a ſtrangulation is felt in the throat, the ſtomach is blown up, and the larynx, or upper part of the windpipe, ſwells externally of a ſudden, and as ſuddenly falls; though the paſſage of liquids is thus obſtructed, yet for ſome time ſolids continue to be ſwallowed with tolerable eaſe; but at length this ſymptom frequently becomes ſo violent, as to prevent ſolids from paſſing as well as fluids.

Some of the unfortunate ſufferers in this cruel diſeaſe are exquiſitely ſenſible, that they are offended even by the air, if it does but reach the ſkin from a diſtant window or door; the light grows troubleſome; and the leaſt motion, or the moſt trifling noiſe, is inſufferable.

The patient's ſighs are now changed to a conſtant murmur, interrupted only at times by louder exclamations of grief; he ceaſes to recollect his moſt intimate friends and acquaintance, and attempts to bite thoſe who come within his reach; but his reaſon returns at intervals, and he laments, in terms of inconceivable horror and diſtreſs, his own wretched ſituation; his thirſt now grows intolerable, yet he attempts in vain to drink, and ſinks into a deſpondency truly affecting; conſcious of the danger to which his friends and attendants muſt be expoſed from his efforts to bite in the deprivation of his reaſon, he exhorts them to conſult their own ſafety, and with inexpreſſible anguiſh of mind, adviſes them to leave him to his miſerable fate.

Towards the concluſion of this melancholy ſcene, the fever and thirſt are augmented; the urine is ſharp, corroſive, and fœtid, though diſcharged in ſmall quantities; the patient foams at the mouth, and hangs out his tongue; his pulſe throbs and becomes convulſive; his ſtrength is exhauſted, cold ſweats appear, the tightneſs and oppreſſion of the breaſt is highly aggravated, and he expires in ſpaſms or convulſions.

It has been remarked, that the infection is communicated in this diſeaſe in the ſame manner as the ſmall-pox by inoculation: in the latter caſe, if no inflammation appears about the places of inſertion, no eruption is produced; and the bite of a mad dog, though it ſometimes heals ſoon after it is inflicted, conſtantly grows inflamed, and breaks out afreſh before the approach of any of the ſymptoms of madneſs.

This diſorder appears to be nervous, from all the principal ſigns, and in particular from the flying pains, the tightneſs of the breaſt, the difficulty of ſwallowing, the dread of water, and the extreme ſenſibility of air, motion, or noiſe; and a cure can only be expected from the ſame means as are uſed to deſtroy the ſpaſmodic irritation in other nervous diſorders, or the peculiar acrimony which occaſions it.

To prevent the fatal effects of bites from mad animals, the following medicines and treatment are recommended.

Let the part be immediately cupped and ſcarified, the wound dilated, or even a portion of the ſurrounding fleſh cut off; after which it ſhould be waſhed, both immediately, and daily during the cure, with water, vinegar, and ſalt, and ſuch dreſſings applied as will keep it open and promote a diſcharge; ſome blood may alſo be taken from the arm.

The patient ſhould then take the following medicine:

Take of *aſh-coloured ground liverwort*, carefully cleaned, dried, and powdered, half an ounce—of black pepper finely powdered, a quarter of an ounce. Mix theſe together, and divide the whole into four doſes, one to be taken every morning of four ſucceſſive days, in half a pint of warm milk from the cow.

After theſe four doſes have been taken, the patient muſt go into a cold bath, or cold ſpring or river, every morning faſting, for a full month; his head muſt be immerſed as well as his body and limbs; and he ſhould be careful not to continue in the water, if it is cold, above half a minute after the total immerſion.

The following is commonly called the *Eaſt India Specific*, and is by ſome eſteemed infallible in the prevention of this diſeaſe.

Take native cinnabar, and factitious cinnabar, of each twenty-four grains—of muſk, ſixteen grains. Let theſe be finely powdered, and taken in a glaſs of brandy or arrack.

If no ſymptom appears of approaching madneſs, this medicine need not be repeated till the end of a month; but if any indiſpoſition ſhould occur, it muſt be given again at the expiration of three hours.

Some prefer the following preſcriptions after a mercurial emetic.

Take of muſk, ſixteen grains—of factitious cinnabar, levigated, half a dram, of the ſaponaceous pill, eight grains—of camphire, ſix grains—of balſam of Peru, enough to make a bolus. To be taken at night.

The next morning a purging potion may be given of the following compoſition.

Take of the infuſion of ſenna, three ounces—of tincture of ſenna, half an ounce—of Glauber's purging ſalts, three drams—of ſolutive ſyrup, two drams. Mix for a draught.

In the evening after this purge, or on the ſucceeding morning, the patient is directed to bathe either in the ſea or a cold bath; after which he is to be rubbed dry and put to bed, and the muſk bolus again adminiſtered, with half a pint of the infuſion of valerian and ſaſafras, encouraging a copious ſweating with plentiful and frequent draughts of ſmall white wine whey; and this courſe is to be continued four, five, ſix, or ſeven ſucceeding nights and days, in proportion to the ſtate of the animal by which the wound was given, and repeated three or four times at the two next changes of the moon.

The following medicines are alſo preſcribed as antiſpaſmodics.

Take of camphire, ſeven grains—of aſafœtida, ten grains—of Virginian ſnake-root powdered, half a dram—of ſyrup of ſaffron, enough to make a bolus. To be repeated daily.

Or, take of purified nitre, two drams—of camphire, half a dram—of Virginian ſnake-root powdered, one dram. Rub the whole together, and divide it into five doſes, to be taken as above.

A dram of the mercurial ointment is alſo recommended to be rubbed into the parts about the wound every day; but the uſe of this, as well as the foregoing medicines, muſt be continued for a conſiderable time, in order to produce the effect deſired: nor do we apprehend either of the firſt mentioned preſcriptions will anſwer the purpoſes of prevention effectually, unleſs they are repeated more frequently, and uſed for a much longer time, than is uſually directed. If this diſeaſe is univerſally allowed to riſe from an irritation of the nerves, relief ought not to be expected more ſpeedily than in nervous complaints of a much leſs violent nature; nor can it be reaſonably conceived but that the preventive medicines will require time for operation, proportioned to that allowed to remedies applied for a cure.

The yellow emetic mercury, or Turbith's mineral, hath been recommended as a preſervative againſt the effects of the bites of mad animals, uſed either in quantities to bring on vomiting, or in ſmaller doſes to act as an alterative; and the ſtrong mercurial ointment, gradually rubbed in ſo as to excite a moderate ſalivation, hath, it is ſaid, been ſucceſsfully tried.

But whatever means are purſued to prevent this dreadful malady, a regard to regimen is neceſſary; all hard, dry, and heating food, and inflammatory liquors of every kind, are to be avoided with extreme care; diluting liquors, acidulated with vinegar, may be taken in conſiderable quantities.

In all probability, if proper means of prevention were uſed in time, and perſevered in, inſtances of canine madneſs would be leſs frequent; but the pretended infallibility of a dip or two in the ſea, and the ſuppoſed efficacy of certain ſpecifics, which having been tried on perſons who probably had never received the infection, have acquired the reputation of preventing the diſeaſe, prove in many inſtances extremely injurious, by inducing thoſe who are in danger of the diſorder to rely on theſe remedies without having recourſe to ſuch as might produce the happy effects which are in vain expected from the others.

In caſe the ſymptoms of an approaching hydrophobia ſhould appear before the patient has had aſſiſtance, opium and muſk are ſaid to be the medicines which are principally to be relied on; of the former the quantity of a grain, or even a grain and a half, is to be given every three hours, or as ſoon as the effect of the former doſe ſeems to have ceaſed; muſk, to the amount of fifteen or twenty grains, may alſo be adminiſtered every ſix or eight hours; ſponges dipped in vinegar ſhould be frequently applied to the mouth and noſtrils, and a piece of flannel wetted with the following liquor to the throat.

Take of liquid laudanum, two ounces—of camphire, one dram. Mix them well together.

The following method of cure hath alſo been preſcribed by a very learned and ingenious medical writer.

Let a conſiderable quantity of blood be taken away, and the operation be repeated twice, thrice, or even four times, according to circumſtances.

The patient ſhould be put, if poſſible, into a warm bath, and this at leaſt twice in the twenty-four hours.

Emollient clyſters ſhould alſo be injected two or three times every day.

The wound, and the parts adjoining, ſhould be rubbed daily with the mercurial ointment.

The whole limb on which the wound has been inflicted ſhould be rubbed with olive-oil, and wrapped in flannels which have been dipped in it.

Every three hours a doſe of the powders, which we have deſcribed as the Eaſt India Specific, ſhould be given in a tea-cupful of the infuſion of elder flowers, or of thoſe of the lime tree.

The following bolus is to be given at night, and repeated in the morning, if the patient is not perfectly eaſy, waſhing it down with a tea-cupful of the laſt mentioned infuſion.

Take of Virginian ſnake-root powdered, one dram—camphire and aſafœtida, of each ten grains—of opium, one grain—of conſerve or rob of elder, ſufficient to make a bolus.

If the patient complains of nauſea at the ſtomach, and a bitterneſs in the mouth, thirty-five or forty grains of the powder of ipecacuanha may be taken as an emetic.

If he takes any food, it ſhould be extremely light, ſuch as panada, or ſoups of mealy or farinaceous vegetables.

And if after recovery the patient ſhould continue weak, or ſubject to terrors, he may take half a dram of the powder of Peruvian bark daily.

But though we appear to treat with contempt the chimerical idea, that a ſingle immerſion in the ſea is ſufficient to carry off infection actually received, and that nothing more is neceſſary to ward off the dangers incurred by the bites of mad animals; yet we do not mean to diſcountenance rational endeavours to avoid the fatal effects of them by a regular courſe of ſea-bathing, accompanied with proper medicines; on the contrary, we are inclined to believe, that ſuch a meaſure may contribute in no inconſiderable degree to the prevention of fatal conſequences from ſuch accidents.

The practices of keeping the patient under water till he had loſt his ſenſes, of terrifying his mind by the repreſentation of ſome fictitious danger, and then throwing him headlong into the ſea, and other experiments of a like nature, ſo frequently tried and ſo confidently relied on, about the beginning of the preſent century, ſeem at preſent to have loſt their credit; no good reaſon could ever be aſſigned, why nerves, already too much irritated, ſhould receive the additional ſhock of terror or apprehenſion; and yet thoſe who recommend ſuch methods of violence, ſeriouſly aſſert, that theſe immerſions cure rather by diſturbing the ſpirits, than by any virtue of the ſalt-water.

The actual cautery, or burning the part with a red-hot iron, is alſo at preſent out of uſe, notwithſtanding we are of opinion that arguments could be urged in ſupport of this practice, much more rational than thoſe which have been advanced in favour of exciting terror in the patient, or keeping him under water till he is more than half drowned; though we are aware very ſpecious ones in behalf of the former may be drawn from the alteration the paſſions of the mind are ſuppoſed to make in the fluid of the nerves and arteries.

We ſhall conclude this chapter with ſome ſhort extracts from a caſe publiſhed among the poſthumous works of a late juſtly celebrated phyſician; and as this caſe aroſe from the bite of a cat, it will ſerve to ſhew that the ſpecies of madneſs which occaſions a dread of liquids, is not confined to animals of the canine kind.

On the fourteenth of February, the maid-ſervant of a reſpectable tradeſman having occaſion to waſh, roſe earlier than uſual: upon her entering the waſh-houſe, ſhe was attacked by a cat, which fixed upon her leg; upon her ſcreaming, her maſter came to her aſſiſtance, and aiming a blow at the cat which miſſed it, the animal ſeized his leg, but he ſoon diſengaged himſelf; and a chairman, who was paſſing by, being called in, ſhe was immediately killed.

Both the maſter and ſervant took the Ormſkirk medicine: the wound which the former had received ſoon healed; but that of the maid-ſervant grew ſo troubleſome, that ſhe got admittance into an hoſpital, where it was cured, and ſhe remained in perfect health at the end of four or five months.

But, about the middle of the following month of April, the maſter complained of a pain in his right-knee, and ſuppoſing it to be rheumatic, took ſome medicines from his apothecary for that complaint; but finding, after uſing them about ſix days, ſome very extraordinary ſymptoms, ſuch as a titillation in the urethra, a contraction of the private parts, and emiſſions after making water, to which he had frequent calls, the medicines were diſcontinued, and he was adviſed to live in all reſpects as temperately as poſſible.

On Thurſday the ſixteenth of June, after a reſtleſs night, he found great difficulty in ſwallowing his tea, though he eat his bread and butter as uſual. At this time he had no other appearance of indiſpoſition than a little paleneſs, and appeared chearful, without diſcovering any uneaſineſs or anxiety. He complained of having ſweated a great deal in the night, and being extremely faint with it; ſaid he had alſo been thirſty in the night, but having attempted, in the preſence of his phyſician, to drink a diſh of tea, he brought it within a few inches of his lips with great compoſure, and then threw the liquor into his mouth, and ſwallowed it with uncommon haſte and perturbation; obſerving, at the ſame time, that he could force it down, and aſking if it muſt be repeated frequently, or if he might be allowed to omit it a while.

He was deſired to forbear the attempt while it continued to affect him with ſuch uneaſineſs, but to endeavour to get down bread, moiſtened with any liquid he choſe, as often as poſſible; and accordingly he ſwallowed bits of bread dipped in wine without much difficulty, both then and frequently during the ſame day, and this was the only nouriſhment he took.

The patient's aſpect varied frequently, his pulſe was rather quicker than the ſtandard of health, and ſomewhat hard, but changed almoſt every minute both in frequency and hardneſs; his fleſh felt moderate, his tongue dry, he made very little urine, and complained much of the contraction; the emiſſions had almoſt ceaſed, and his bowels had been emptied the preceding morning.

At this time he was ordered to loſe ſix ounces of blood, and to take a ſcruple of native cinnabar, and half a ſcruple of muſk in a bolus every four hours, and to get down as much fruit or other nouriſhment as poſſible.

During the courſe of the day, beſides the bread moiſtened with wine, he ſwallowed ſome ſtrawberries and a few bits of pudding, but did not endeavour to drink: about five in the afternoon he was requeſted to attempt ſwallowing a little liquid, and it being brought to him, he threw it haſtily into his mouth, and got it down with extreme difficulty and perturbation; the moment it touched the gullet, all the muſcles concerned in ſwallowing appeared to be convulſed.

At this time his countenance was grown more pale, and he ſeemed much agitated and diſtreſſed; complained of extreme thirſt, and of the impoſſibility of ſwallowing any liquid; his tongue was white, but did not appear dry, and he was perpetually making efforts to diſcharge a viſcid tenacious phlegm which lined the *fauces*, or entrance of the throat; the heat of his fleſh was moderate, his pulſe quick, hard, and irregular; and he had ſtrong palpitations of the heart.

He was at this time perfectly ſenſible; and when his endeavours to diſcharge the phlegm would allow him to ſpeak, gave pertinent anſwers. He had made but little urine ſince the morning, complained of the diſagreeable ſenſation in the ſcrotum; which, as well as the emiſſion, ſtill continued.

The blood which was taken away in the morning had ſome ſlight appearance of inflammation; the *craſſamentum*, or ſolid part, was firm, with ſlight traces of ſize; but the *ſerum*, or fluid part, was remarkably yellow. He had no evacuation by ſtool this day, and upon the whole his diſorder had apparently increaſed ſince the morning.

A laxative clyſter was ordered, and he was directed to be carried to a warm bath, and to remain in it as long, and in ſuch degree of warmth, as was agreeable to him; and after he had bathed, clyſters of milk and water were to be repeated as often as they could be adminiſtered with convenience, in the laſt of which a dram of Dover's powder was ordered to be given.

The patient was alſo directed to rub two drams of ſtrong mercurial ointment on his legs and thighs as ſoon as he returned from the bath, and to get down as much ſuſtenance as he could.

Theſe injunctions were followed, the laxative clyſter produced a proper effect, and the warm bath relieved him whilſt he continued in it; but all the ſymptoms returned with increaſed violence in the night, which he paſſed totally without ſleep, and in much agitation, not being able to lie ſtill a ſingle moment.

In the morning of the ſeventeenth his countenance beſpoke great diſtreſs, though he endeavoured to conceal it; he was ſometimes calm, and at others agitated, and talked much but ſenſibly; he had now a copious flow of leſs viſcid ſpittle; his tongue was white and moiſt, but foul; his pulſe quick, ſmall, hard, and irregular; his hands rather cold than hot; he had made water with leſs difficulty, and without the uſual conſequence; and the pain in the ſcrotum was gone off.

He was now ordered to be blooded ſtanding, according to his ſtrength, to be put again into the warm bath, and continued in it as long as was agreeable to him; the milk clyſters, with Dover's powders and the mercurial unction, were directed to be repeated; and a ſcruple of opium was ordered to be made into twenty pills, three to be given when the patient came out of the bath, and two every hour till he ſeemed diſpoſed to ſleep.

At five in the afternoon of this day he had followed the laſt mentioned preſcriptions, except taking the pills; and conceiving he had received much benefit from the warm bath, entertained great hopes of a ſpeedy recovery.

But a vaſt quantity of viſcid phlegm was now continually flowing into his mouth, which he was as conſtantly employed in diſcharging, as it ſeemed to have the ſame effects upon the organs of ſwallowing, as if he attempted to get down any other liquor, and gave him extreme uneaſineſs: to get rid of this defluxion, the moment he felt it at the entrance of the throat, he exerted a ſudden and vehement expiration, as if with a deſign to blow away the moiſture, ſo offenſive to him, with the utmoſt force and expedition; and theſe efforts occaſioned a ſound not very remote from the hollow barking of a dog.

When he was not thus employed, he talked conſtantly but coherently; his eyes had a particular keenneſs, and all his motions were quick and vehement; his pulſe was alſo quick, hard, and ſometimes trembling and irregular; his hands were cold and clammy, but the general heat of his body temperate.

Attempting to be ſhaved, every application of the lather and razor gave him great emotion, and every movement excited ſome degree of agitation and anxiety.

Whilſt he was in the bath, the perſon who attended him poured ſome of the water on his head and face; and though this at firſt diſtreſſed him, yet he at length ſo far conquered his averſion to it, as to pour water on himſelf in the ſame manner.

After repeatedly expreſſing the ſatisfaction he had received from the warm bath, he deſired to go into it again; which being aſſented to, he entered it with increaſed difficulty and ſeeming reluctance, and remained in it near half an hour: about nine o'clock he was brought home; after this he refuſed to take the pills, or any other medicine; grew fretful, reſtleſs, and delirious, but offered no violence; and after remaining in this condition about two hours, he reclined his head gently on the pillow, and expired.

When the patient was bathing, attempts were made to diſcover the condition of the part which had been bitten, but ineffectually; after his death it was examined with attention, but no morbid appearance was perceivable.

From this caſe ſome obſervations will naturally ariſe on this dreadful malady and the treatment of it.

It is apparent, that the Ormſkirk medicine is not always taken with ſucceſs as an antidote to this ſpecies of poiſon: but of this celebrated remedy more will be ſaid when we treat of it among other popular medicines.

The neceſſity of dilating the wound on all occaſions is evident, as to this circumſtance was moſt probably owing the ſafety of the maid-ſervant, who was wounded at the ſame time with her unfortunate maſter.

It appears that muſk and cinnabar were adminiſtered in this caſe, but not in the quantities preſcribed in the Eaſt India preſcription; thoſe medicines therefore were not tried.

No efforts were made to prevail on the patient to take opium in the early ſtages of his illneſs, or to convey it into his bowels by clyſter, when it became troubleſome to him to ſwallow any thing; nor does it appear that any attempt was made to convey in this way any other ſuſtenance beſides milk and water, or even medicine, except a dram or two of Dover's powder, into the patient's inteſtines.

No endeavours were uſed to conquer the averſion to water, or to reconcile the patient to the uſe of fluids; or any means tried to promote the diſcharge of the phlegm which gave him ſo much uneaſineſs.

Upon the whole, from the circumſtances of this caſe, no concluſions can be drawn of the inefficacy of any of the preſcriptions which have been offered for the cure of this deplorable diſeaſe; the riſe, progreſs, and ſymptoms of which, are however very accurately deſcribed.

CHAP. XXVIII.

Of the Bites and Stings of Poiſonous Reptiles and Inſects.

OF theſe, the bites of adders have been ſo notorious for their venom, that in the earlier ages they were held ſacred as the miniſters of divine wrath; and in more enlightened times, the figure of a viper was added to the ſtatues or buſts of eminent phyſicians, as an acknowledgment of that ſkill which could avert the dangers apprehended from the bites of theſe reptiles.

The ſymptoms which follow the *bite of a viper*, when either one or both it's greater teeth have faſtened on any part of the human body, are an acute pain in the place wounded, with a ſwelling, which is at firſt red; but afterwards grows livid, and by degrees ſpreads to the neighbouring parts, and occaſions great faintneſs; a quick, but low, and ſometimes interrupted pulſe; great ſickneſs at the ſtomach, with bilious convulſive vomitings; cold ſweats, and in ſome inſtances pains about the navel; and without ſpeedy aſſiſtance death enſues, unleſs the ſtrength of nature ſhould prove ſufficient to repel the poiſon from the vitals; and even in that caſe the ſwelling continues ſome time, and not unfrequently increaſes after the abatement of the other ſymptoms: little puſtules frequently appear about the wound, from which a thin acrid humour ſometimes flows. In general the colour of the whole ſkin changes and turns yellow, as if the patient was affected with the jaundice.

Though theſe circumſtances may vary, and be more or leſs aggravated in different climates and ſeaſons of the year, and according as the ſize and ſtrength of the animal itſelf enabled it to communicate a greater or leſs proportion of the venom;

yet the ſymptoms are nearly of the ſame appearance, unleſs the bite ſhould happen to be unaccompanied with the effuſion of that liquor by which the whole diſorder is occaſioned.

Nor are theſe creatures ſupplied with this deadly fluid for the purpoſe of being miſchievous to man; on the contrary, it is provided to anſwer a purpoſe uſeful to the human race, and abſolutely neceſſary to the exiſtence of the animal itſelf.

Vipers feed upon frogs, toads, mice, moles, and other ſmall animals, the increaſe of which would be troubleſome and injurious to mankind; but being unprovided with teeth fit to chew this food, they ſwallow it whole, where it lies in the ſtomach; or, if that ſhould not be large enough to contain it, partly in the throat, till it is gradually diſſolved into a fluid fit for the nouriſhment of their bodies; but this manner of feeding requires, that the prey taken for this purpoſe ſhould be immediately killed, and the force of the ſtomach being unequal to this taſk, the fangs and the poiſonous fluid contained beneath them are provided for this end; nor are they ever employed to any other uſe, except the viper be provoked by pain or fear, to apply them as weapons of defence againſt the attacks of men or other animals.

The fangs are in number one, two, or three, on each ſide, beſides ſmaller ones, which are intended to ſupply the place of the larger, if theſe ſhould fall out, or be taken away by any accident; theſe great fangs are hollow till within a certain diſtance of the point, and at the termination of the cavity there is a ſmall ſlit, like that in a pen, which is the outlet or paſſage for the poiſon.

This liquor is ſeparated from the blood by glands, which running towards the roots of the fangs, diſcharge it into a bag, which lies there, and through which the poiſonous teeth ſeem to paſs; and on any attempt to bite, this fluid is, by the contraction of the fibres in opening the mouth, and by the preſſure of the root of the tooth when the extremity has ſeized the prey, forced into the cavity of the fang, and thence through the opening or ſlit into the wound which the point of it has inflicted.

The quantity ſo emitted ſeldom exceeds a ſingle drop, and the ſtructure of the parts which compoſe this poiſonous fluid, as deſcribed by an accurate obſerver, will account for it's operation.

A drop of this matter being placed on a plate of glaſs, and examined with a microſcope, exhibited nothing at the firſt inſpection but a parcel of ſmall ſalts, nimbly floating in the liquor; but in a ſhort time the appearance was changed, and theſe ſaline particles ſeemed to be ſhot out into chryſtals of incredible fineneſs and ſharpneſs, with ſomething like knots here and there, from whence they ſeemed to proceed; ſo that the whole texture repreſented a ſpider's webb, but infinitely more fine and minute: and yet ſo well hardened were theſe little tranſparent darts, that they retained the ſame form upon the glaſs for ſeveral months.

The cure for the bite of a viper, is ſaid to be the fat or greaſe of the ſame animal; but we apprehend olive-oil, warmed and gently rubbed into the part, beginning the unction always above the wound, if it is in a limb, will more effectually anſwer the purpoſe: ſucking out the poiſon from the wound, was a practice of great antiquity, and hath again been recommended by ſome modern writers, though we do not ſee any neceſſity for impoſing a taſk, at leaſt very diſagreeable, on the friends or attendants of the injured perſon, when it is univerſally admitted, that the ſimple remedy we have already preſcribed is ſufficiently efficacious to preſerve his life from the ſmalleſt riſque or danger, and in general to effect the cure without the intervention of any other aſſiſtance.

But ſhould the ſwelling continue, or be attended with any conſiderable degree of inflammation, the ſkin may be relaxed by emollient fomentations, and poultices of white bread, milk, and oil.

We are happily free from thoſe poiſonous inſects, ſuch as centipedes, ſcorpions, and the like, which infeſt warmer climates: the little injuries ſuſtained from the ſtings of waſps and bees, may be relieved by a mixture of oil and vinegar, though ſome uſe honey for this purpoſe, and others parſley bruiſed, houſeleek, rue, onions, or garlick.

Before we conclude this chapter, it may not be improper to mention the negroe remedy for the bite of a rattle-ſnake, which may be of uſe to thoſe who viſit countries where this ſerpent is found.

Take of the roots of plantain and horehound, (if in the ſummer the roots and branches together) a ſufficient quantity. Beat them in a mortar, and expreſs the juice, of which give the wounded perſon a large table ſpoonful as ſpeedily as poſſible: if the patient is ſwelled, it muſt be forced down his throat. If this does not relieve, which is ſaid to be ſeldom the caſe, give another ſpoonful, about an hour after, which never fails; and apply a leaf of tobacco, moiſtened with rum, to the wound: if the roots of the herbs are dry, they muſt be moiſtened with water.

CHAP. XXIX.

Of Vegetable and Mineral Poiſons.

THE plants of this climate, which are poſſeſſed of poiſonous qualities, are principally *hemlock*, *hemlock dropwort*, *wolf's bane*, and *deadly nightſhade*; to which may be added particular ſorts of *muſhrooms*.

The firſt of theſe plants has been ſometimes eaten by miſtake for parſley; the roots of the ſecond for carrots; the third hath been accidentally mixed with ſallad: the berries of the nightſhade are temptations to children; and the difficulty, not to ſay impoſſibility, of diſtinguiſhing thoſe muſhrooms which are wholeſome from the fungus of a poiſonous quality, hath ſubjected many perſons, who are diſpoſed to gratify their appetites at the hazard of their healths, to the inconveniencies which may follow the uſe of the latter inſtead of the former.

The following ſymptoms appeared in conſequence of eating a ſmall quantity of wolf's bane, and this account is nearly deſcriptive of the effects produced by the other poiſonous plants above mentioned.

A ſenſation of tingling heat in the tongue and jaws, ſo that the patient's teeth ſeemed to himſelf as if they were looſe, and his face as if it was ſwelled; this tingling ſenſation gradually ſpread over his whole body, particularly to the extremities; his knees and ancles loſt their ſtrength, and he had frequent twitchings of the tendons; ſometimes he perceived a ſenſible check of the circulation through his limbs: at length he became giddy, a miſt collected itſelf before his eyes, he complained of a humming noiſe in his ears; his ſenſes failing, he fainted; his eyes and teeth were fixed, his noſe was contracted, he breathed ſhort and with difficulty, and cold clammy ſweats broke out on his hands, feet, and forehead; and all theſe ſymptoms followed within two hours after eating the herb.

For the cure of poiſons occaſioned by

eating either of theſe poiſonous plants, an emetic ſhould be immediately given; ſome recommend a ſolution of white vitriol for this purpoſe, and large quantities of warm water to work it off; but we apprehend milk, oil, and warm water, or any fat broths, would better anſwer this purpoſe; but theſe muſt be taken in large and frequent draughts, ſo that no part of the poiſonous matter may remain on the ſtomach: if any medicine is neceſſary to excite vomiting, we would prefer the powder of ipecacuanha or oxymel, or vinegar of ſquills, to the ſolution of vitriol, which ſhould only be uſed when the others do not ſucceed.

Clyſters of oily compoſition ſhould alſo be frequently adminiſtered, and the patient ſhould continue for ſome time to drink freely of teas of the emollient herbs, or whey ſweetened with honey, and with a mixture of diſtilled vinegar in every draught.

A late melancholy inſtance of the fatal effects of water diſtilled from the leaves of *laurel*, hath occaſioned ſuch enquiries into the qualities of this plant, as have determined it to be the moſt deadly of all the vegetable poiſons which are produced in this iſland.

This plant was formerly uſed even for medicinal purpoſes, and the leaves of it have commonly been ſubſtituted for bitter almonds in making ratifia, and for the purpoſes of the kitchen, though it's baneful qualities ſeemed to be known by ſome botanical writers.

It appears from the circumſtance above alluded to, that the water diſtilled from the leaves of laurel, is a poiſon which operates with equal celerity and certainty, bringing on immediate ſpaſms in the ſtomach, and fatal convulſions, in ſo ſhort a ſpace as an hour after it hath been ſwallowed.

Emetics, worked with oily mixtures, ſhould be inſtantly adminiſtered; and as ſoon as this evacuation hath been made, cordial medicines may ſucceed.

But it is to be hoped, no houſewife will hereafter uſe the leaves of this plant in any preparation for the table; as the diſtillation of them could only be for purpoſes of iniquity, we truſt no caution is neceſſary on that head.

Opium, taken in large and improper doſes, either by accident or with a miſchievous intent, produces, according to the quantity, either a moderate degree of mirth, reſembling madneſs or inebriety, or elſe heavineſs and ſtupidity; it alſo occaſions giddineſs, fluſhes, or a fixed red in the face; ſwelled lips, diſagreeable dreams, ſtartings, convulſions, cold ſweats, a dilatation of the pupil of the eye, imperfect ſpeech, a ſlow full pulſe, quickneſs and difficulty of breathing, nauſea, an itching in the ſkin, vomiting, hiccups, madneſs, and faintings, with cold ſweats.

A vomit of ipecacuanha, ſquills, or the ſolution of white vitriol, to the quantity of half a dram, according to circumſtances, ſhould be immediately given, and worked off with conſiderable quantities of ſome of the oily liquids above preſcribed, and theſe emetics ſhould be repeated ſeveral times: if the patient be of a robuſt and vigorous habit, bleeding will be neceſſary, after which a table ſpoonful of ſharp vinegar ſhould be given frequently; ſinapiſms may be alſo applied to the feet, and bliſters to his arms; his body ſhould be well rubbed, and ſhook, toſſed, and moved about; if the inclination to ſtupefaction or ſleepineſs is prevalent, volatile ſpirits and other ſtimulatives ſhould be applied to the noſe; clyſters of tobacco ſmoke may alſo be frequently adminiſtered, and as ſoon as the patient is capable of ſwallowing, ſaline draughts, with ſalt of wormwood and freſh lemon-juice.

Nouriſhing food and cordials, or gentle purgatives, will be neceſſary, according to the ſtate of the patient's body, after recovery from the effects of this ſpecies of poiſon: if he continues low and weak, the former will be proper; but if there is any ſuſpicion of inflammation in the ſtomach or other inteſtines, the latter with cooling medicines will be required.

Among the *mineral poiſons, white arſenic* is the moſt powerful; and in deſcribing the ſymptoms produced by this, we ſhall comprehend moſt, if not all, thoſe which are occaſioned by others.

The firſt and immediate conſequence of ſwallowing arſenic, is a dryneſs and inflammation of the throat, dejection, ſtupefaction, fainting, delirium, tremblings, convulſive ſpaſms, palſy, thirſt, and burning heat in the ſtomach; intolerable gripings, which, accompanied with violent hiccups and cold ſweats, bring on vomitings of black matter, fœtid ſtools, mortification of the ſtomach and bowels, and conſequential death.

But beſides the effect which arſenic produces in common with other poiſons, it corrodes the coats of the ſtomach, perforates the inteſtines, and occaſions ſwelling and mortification of the whole body, and a ſudden putrefaction after death, particularly of the private parts.

When the effects of this poiſon do not prove fatal, tremors, palſies, epilepſies, and lingering hectics, are the uſual conſequences.

Emetics ſhould be adminiſtered as ſpeedily as poſſible, and repeated; and in this caſe the ſolution of white vitriol is to be preferred, becauſe it's operation is more ſharp and certain than either the powder of ipecacuanha or emetic wine, directing the patient to drink plentifully of oily broths, or oil with warm water, and injecting clyſters of the like compoſition; the ſtomach and inteſtines ſhould be filled with unctuous and emollient fluids, ſuch as ſweet oil, melted butter, chicken, or veal broth, butter-milk, or new milk.

When evacuations of both kinds have taken place freely, mucilages, and ſuch demulcents as ſheath the acrimony of the poiſon, will be proper; for this purpoſe gum Arabic may be diſſolved in barley-water, and given as a drink or in clyſters; in either of which may be alſo diſſolved ſpermaceti, or the powder of gum tragacanth.

After the poiſon has been expelled, care muſt be taken to keep the patient's body open with manna, ſenna, Glauber's ſalts, and the like gentle laxatives; and the patient's food for ſome time ſhould conſiſt of fat broths, compoſitions of milk, and other ſpoon-meats: his drink may be infuſions of the mucilaginous herbs or linſeed, or milk and water.

The following experiments with this fatal mineral drug, may ſerve to diſpel doubts in caſes of apprehended poiſoning, or attempts to poiſon.

This ſpecies of arſenic is of a milky whiteneſs, gritty, and wholly inſipid to the taſte; when put into cold water, and the mixture ſtirred, a kind of film of a ſulphureous appearance riſes to the ſurface of the water, and continues there; but the greater part of the arſenic ſinks to the bottom of the veſſel, and remains undiſſolved.

If it is thrown on an iron heated red-hot, no flame appears, but the whole riſes in thick white fumes, which have the ſmell of garlic; and if a plate of cold iron is held over theſe fumes, it will be covered with a white duſt or flour.

If a quantity of arſenic is incloſed betweeen two plates of copper, and the whole is heated red-hot in a fire, the copper will become white.

Boil five grains of white arſenic a few minutes in two ounces of water; filter it through paper, and divide it in five equal parts, in ſo many different glaſſes: into the firſt pour a few drops of the purified ſalt lye, which will produce a white cloud hanging ſomewhat above the middle of the liquid in the glaſs; to the ſecond, add ſome drops of the ſpirit of ſal ammoniac, and it will occaſion a few particles of pale ſediment; to the third, ſpirit of ſalt, which will precipitate a conſiderable quantity of a light-coloured ſubſtance; into the fourth, put ſome ſtrong ſpirit of vitriol, which will occaſion the like precipitation, but the ſubſtance will harden into glittering chryſtals, adhering to the ſides and bottom of the glaſs; ſyrup of violets, mingled with the water, in the fifth glaſs, will tinge it of a beautiful pale green colour.

It muſt be obſerved, that theſe appearances will ſometimes differ according to the quality of the mineral itſelf, or of the ſeveral matters directed to be added to the different glaſſes, which may be accidentally more or leſs ſtrong or pure.

If *corroſive ſublimate* ſhould by any accident have been taken in dangerous or imprudent quantities, the beſt antidote is a weak ſolution of any mild alkaline ſalt, ſuch as ſalt of tartar, ſalt of wormwood, or common pearl aſhes, in the proportion of one ounce to a gallon of water; of this ſolution conſiderable quantities ſhould be drank, which will deſtroy the *ſaline ſpicula*, or ſharp points.

BOOK V.

Of Venereal Diſeaſes.

IF the painful but neceſſary taſk we have now undertaken ſhould require an apology; if the promulgation of rules for the management, and medicines for the cure of theſe diſeaſes, ſhould be conſidered as an encouragement to vice; or if it ſhould be urged that the degree of ſhame which very properly attends the contracting ſuch diſorders, and the fear of being expoſed in the communication of their indiſpoſitions, may deter many from deviating from the paths of innocence; and that therefore the publication which renders ſuch an expoſure unneceſſary, is derogatory to virtue, and injurious to ſociety: we beg leave to obſerve, it is not for the *vicious* we write, but for the *unfortunate*; that venereal taints may be contracted in a variety of ways without the ſmalleſt degree of criminality; and that ſuch as are wretched enough to be thus undeſignedly and unknowingly the victims of this contagion, will be moſt likely to fall ſacrifices to the cruel diſaſter, either from ignorance or delicacy. The diſſolute and debauched are at no loſs to diſcover the conſequences of their illicit amours in the earlieſt moments of indiſpoſition; nor are they reſtrained from ſeeking immediate aſſiſtance by dread of ſhame, or apprehenſions of detection: it is the innocent and unſuſpecting ſufferer, who, unconſcious of having merited the puniſhment, languiſhes in ſecret miſery, unacquainted with the nature of the complaint till it is perhaps paſt remedy, and who would probably rather endure the moſt fatal effects of it, even if the cauſe was known, than apply for relief under appearances which might bring virtue into ſuſpected diſgrace.

Nor are we inclined to think that all, or indeed any of thoſe who receive the infection in conſequence of indulging unlawfully a natural paſſion, ſhould be left to their fate: which we apprehend is pretty nearly the caſe of thoſe who, invited by the numerous bills diſtributed in the ſtreets and ſtuck againſt the walls, reſign themſelves to the care of ignorant quacks; who being wholly unacquainted with the ſymptoms and appearances of the diſeaſe they undertake to cure, treat all ſtates and ſtages of it alike; and, regardleſs of habit and conſtitution, or the virulence or progreſs of the diſorder, adminiſter to all indiſcriminately the ſame quantities of the ſame medicine or poiſon; (for in different caſes, it may be either;) meaſuring the length of the pretended cure by the ſtrength of their patient's pocket, and giving up their hopes of one with their expectations from the other.

And as the paſſions will remain ungovernable whilſt human nature continues to be frail, endeavours to leſſen an irremediable evil, and to reſcue from untimely fates or loathſome lives numbers of individuals, who unable to avail themſelves of the public charitable inſtitutions, or to obtain help from the regular and ſkilful phyſician, are driven to the neceſſity of placing confidence where none is due, will at leaſt be allowed works of moral and prolitical rectitude: in the former light it is a duty to alleviate the diſtreſſes of our fellow-creatures; and in the latter, every life which is ſaved is an addition to the ſtrength and riches of the ſtate.

It is unneceſſary to enter into the field of argument reſpecting the origin of venereal diſeaſes, or the firſt introduction of them into Europe; it may poſſibly ever remain a queſtion, whether the infection was imported by navigators, or created by libidinous exceſs; nor is it of conſequence enough to deſerve our attention: certain it is, that they ſeem to be marks of the diſapprobation of the Almighty, ſet on thoſe who offend his ſacred laws, rendering their bodies as loathſome as vice and ſenſuality have already made their ſouls.

But the manner in which the infection may be communicated, is a matter of great importance; becauſe it is not merely confined to the act of coition, but may be contracted by other means; and it is therefore neceſſary to enquire particularly what thoſe means are, that they may, as far as poſſible, be avoided or guarded againſt.

It has been held, that it may be communicated by kiſſing; not merely from the breath, (for deplorable indeed muſt be the condition of that patient whoſe body is ſo contaminated that he exhales contagion) but by the cloſe contact of the lips; in which caſes the lips themſelves, and the tongue and throat, will be the parts firſt affected, and will become ſore and ulcerated.

Sucking children may either receive infection from the breaſts, or having hereditary taints, may communicate it to the nurſes; and in thoſe inſtances the lips of the child or the breaſt of the nurſe, as the caſe may be, will exhibit the firſt appearances of diſeaſe: nor are inſtances wanting of nurſes, who have received the infection from children they have ſuckled, communicating it to their huſbands; though this has been conſidered as a doubtful matter, and many an innocent female has ſuffered very unjuſt cenſure from circumſtances evident to experience, and reconcileable to plain reaſon.

Even ſleeping in the ſame bed may communicate theſe diſeaſes, if the patient has venereal ulcers or eruptions, or if he is ſubject to profuſe ſweats; but this, as well as the former caſes, can only happen when the diſorder is in a confirmed and very aggravated ſtate.

Venereal taints may alſo be received by accidental inoculation; ſuch as a cut finger touching an ulcerated part where there is a conſiderable diſcharge of virulent matter, or the ſame knife which has juſt opened a buboe, or venereal ſwelling, making an inciſion into any part of the body of a perſon in health.

But hereditary taint or infection is of all others the moſt obſtinate and difficult of expulſion, becauſe it ſhews itſelf in ſuch an infinite variety of ſhapes, that it is hardly poſſible to aſcertain the reality of it's exiſtence, or of conſequence to apply proper remedies to eradicate the morbid particles which are ſo intimately blended with the infant habit. Hence it is that few children, born of parents corrupted by venereal diſeaſes, ſurvive the years of childhood; or, if they ſtruggle through that period, they are ſubject to a thouſand maladies, all ariſing from the ſame cauſe; and, beginning life at the wrong end, have to combat thoſe infirmities from their cradles, which in the ordinary courſe of things are attendant only on the decline of life and the advances to old age.

Eaſily, therefore, as this infection is communicated, and ſubtile as is the poiſon it conveys, becoming ſo univerſally deſtructive to every part of the human body, and deſcending with unabated virulence to our poſterity; how much is it our duty, as well as our intereſt, to avoid the foul contamination, and by the lawful and moderate gratification of thoſe paſſions which were implanted in us for purpoſes widely different from thoſe of licentious ſenſuality, to preſerve our bodies from diſeaſe, and our minds from corruption of a nature ſtill more pernicious!

CHAP. I.

Of the Virulent Gonorrhœa.

THE *gonorrhœa* is an involuntary diſcharge of morbid matter from the genital parts of either ſex; and the time of it's appearance after infection is uncertain, being ſometimes earlier and ſometimes later, but ſeldom ſooner than twenty-four hours, or at a greater diſtance than ten or twelve days: five or ſix days uſually determine the certainty of it's having been received.

The firſt ſymptom obſervable in men, is commonly a ſenſation rather pleaſing, in the whole or ſome part of the urinary paſſage; to this ſucceeds an uneaſineſs about the parts of generation, with the appearance of a ſmall quantity of matter about the orifice of the urethra, which is whitiſh or rather watery when the diſorder is moſt favourable, but ſoon becomes yellow, differing daily in colour and conſiſtence; and if the virulence is great, changing to a greeniſh colour, and ſometimes appearing ſtreaked with blood.

When the running is apparent, the orifice of the urethra is alſo ſwelled and inflamed; though this ſymptom is ſometimes perceivable previous to the commencement of the diſcharge, and is accompanied with a ſenſation ſomewhat diſagreeable in making water, which is followed by a pungent ſmarting, and extreme heat throughout the whole duct of the urethra, but more eſpecially at the termination of it. The linen now begins to be ſpotted, and the edges of the ſpots on it are of a darker colour than the centre; and this dark margin to thoſe ſpots is a diſtinguiſhing mark of the venereal diſeaſe: the pain and ſmart in paſſing the urine, and the quantity of matter diſcharged from the urethra, now increaſe, as well as the inflammation at the orifice of the urethra, which is apparent from the hardneſs and redneſs of the edges; a ſtiffneſs and hardneſs is perceptible through the whole length of the urethra; and a ſenſe of ſtricture or tightneſs in the penis, more particularly during erection: as the diſeaſe gains ground, the matter diſcharged becomes more thin, loſes it's clammineſs, and is of a worſe colour. The inflammation frequently occaſions a crookedneſs, or curved figure of the penis, and an erection with involuntary emiſſions when the patient is warm in his bed; and this ſymptom is called a *chordee* or *priapiſm:* if the inflammatory ſymptoms run high, a ſtrangury or difficulty of paſſing the urine occurs; and ſometimes the inflammation in the prepuce, or ſkin which covers the glands, prevents it's being drawn back, which ſtate of the part is called a *phymoſis;* and when the ſkin being drawn back, cannot from the ſame cauſes be returned, this ſymptom is ſaid to be a *paraphymoſis;* and both theſe caſes require immediate attention, as a mortification frequently takes place if they are not ſpeedily relieved, or the whole penis becomes ſwelled and puffy, and without great care a gangrene follows, and in all caſes ulcers are apt to be formed: in this manner the inflammation generally continues, increaſing with additional ſymptoms for a week or two. If a ſufficient diſcharge can be obtained to waſh away the venereal matter faſter than it is formed, the ſymptoms may continue in the ſame ſtate for ſome time, and then gradually decreaſe under proper applications.

Other ſymptoms alſo attend this diſorder whilſt it continues under the denomination of a *recent gonorrhœa* or *clap*, ſuch as ſhankers or chancres, buboes, and ſwelled teſticles; each of which will be treated of hereafter.

When the *virulent gonorrhœa* begins to yield to medicine, a reſtoration of health generally follows ſpeedily; the inflammation and difficulty of voiding the urine go off by degrees; the diſcharge, which was before ſharp, acrimonious, offenſive to the ſmell, and ſometimes ſtreaked with blood, changes to regular matter; and inſtead of thoſe watery, bloody, greeniſh, or yellow appearances, becomes of a pale yellow colour, and, regular conſiſtence; and after a ſhort continuance in this ſtate, grows ropy, clear, and ſtringy, and ſo diſappears by degrees.

But from the difference in the ſtructure of the parts of generation, the ſymptoms of this diſorder in women differ from thoſe in men.

The urethra is principally the ſeat of this diſeaſe in men, and the vagina, or paſſage from the womb, in women; and in the latter, as well as the former, the whole private part ſoon partakes of the infection, and ſuffers by the ſymptoms: in women the approach of the appearances of infection is rather quicker than in men, and the ſymptoms ſeldom riſe to ſuch a height of inflammation; yet, as their fibres are more delicate and relaxed, the diſcharge is generally more copious.

It has been an obſervation, that the ſymptoms are particularly ſevere, and the pains more acute, in the firſt infection, than after the patient has been repeatedly ſubject to theſe diſorders; and this is more obviouſly the caſe in women than in men: the firſt contagion in a young woman produces the moſt aggravated ſymptoms, whilſt thoſe who have been accuſtomed to venereal injuries, perceive ſcarce any inconvenience, and but for the communication of the contagion, hardly know when they have received the infection.

But about three or four days after coition with a diſeaſed man, the female patient feels from the irritation of the parts, an increaſed inclination for venereal pleaſures; but this ſenſation ſoon changes to a painful one, with a darting and ſhooting, and a conſtriction of the vagina, attended with intenſe pain in ſuffering the act of coition, occaſioned by the inflammation and fulneſs of the veſſels; and the ſeveral internal parts of the pudenda, or female private part, are affected with a kind of ſtiffneſs or erection, ſimilar to the priapiſm in the other ſex. The conſtrictive pains now extend from the exterior part of the pudenda to the lower region of the belly, together with a kind of creeping motion about the ſides and hips, and dull pains acroſs the loins, and at the lower extremity of the backbone; the diſcharges aſſume nearly the ſame appearances and changes as thoſe from men.

The female ſex being ſubject to another diſeaſe occaſioning a diſcharge of matter, not always differing wholly in appearance from that formed by venereal infection, miſtakes of a very fatal nature have often ariſen: and women who have unhappily contracted venereal taints from unfaithful huſbands, have, under the perſuaſion that the complaints they have laboured under, have been occaſioned by the fluor albus or whites, ſuffered the virulent gonorrhœa to proceed unchecked, to the deſtruction of their conſtitutions, the production of diſeaſed and miſerable children, and in many caſes to the loſs of life itſelf.

The treatment and cure of venereal diſeaſes has been ſo differently repreſented by different writers, and the practice even of phyſicians differs ſo widely, that if we were to give merely our own opinion on the ſubject, it would but be to add one ſyſtem more to the vaſt variety which have been already offered: we ſhall therefore lay before our readers the methods which have been propoſed by ſome of the moſt eminent who have written on theſe diſorders, and ſubmit to them ſuch improvements, as have been ſuggeſted to us by our own practice and experience.

But, however phyſicians have diſagreed with reſpect to medicine, and to internal and external applications, they all ſeem to concur in the neceſſity of a ſtrict regimen, as an indiſpenſible ingredient in the cure of every complaint which ariſes from venereal taints.

The patient's food in a recent gonorrhœa, will not be required to be ſo limited as in a fever or diarrhœa; he may be indulged in moderate quantities of light animal food, plainly roaſted or boiled, though the former mode of dreſſing it is preferable; but this ſhould only conſtitute one meal in the day: the others ſhould be made up with ſpoon meats, tarts, fruits, or biſcuits; all ſalted and dried meats muſt be carefully avoided, nor muſt ſpices or aromatics be admitted in any part of the cookery; vegetables and preparations of the milk kind are alſo highly proper, as well as thin broths and gruels.

The patient's drinks ſhould be wholly of the diluting kind, and taken very freely; teas of the marſh-mallows, or common mallows, decoctions of the roots of liquorice; infuſions of linſeed, whey, and milk and water, are calculated to thin the juices, and promote the diſcharge as well of matter as of urine: if wine and ſpirits cannot be given up entirely, they ſhould at leaſt be ſo diluted as to deſtroy the inflammatory qualities of them.

The leſs exerciſe is taken, and eſpecially on horſeback or in a carriage, the better; walking is the motion which is the leaſt injurious, but even this may be uſed to exceſs.

The following are the methods of cure which are uſually preſcribed, and are generally attended with ſure, though ſlow ſucceſs.

On the firſt appearance of the ſymptoms, the part ſhould be well and frequently waſhed with warm milk and water, and this practice ſhould be continued during the whole courſe of the diſeaſe; to this may be added an injection of freſh oil of almonds.

During the firſt week, let the following laxative medicine be adminiſtered twice or three times, and repeated occaſionally afterwards.

> Take of barley water, two ounces—of Rochelle ſalts, half an ounce—of ſyrup of roſes, two drams. Make a draught, to be taken in the morning.

When the virulence of the ſymptom is ſomewhat abated—

> Take of calomel, from three to five grains, according to conſtitution and circumſtances—of conſerve of hips, enough to make a bolus.

Let this bolus be given at going to bed, and the ſucceeding night another of the ſame compoſition; and, on the morning which follows taking the ſecond bolus, adminiſter this purge.

> Take of the infuſion of ſenna, three ounces—of ſoluble tartar, three drams—of tincture of ſenna, two drams. Varying the quantities in proportion to ſex, age, and habit of body.

This courſe is directed to be repeated two or three times, as the ſymptoms require; after which the glans or nut of the penis, and the perineum or ſpace between the privities and the fundament is to be well rubbed with ſtrong mercurial ointment of the following compoſition.

> Take of prepared hog's lard, half a pound—of quickſilver, three ounces—of ſimple balſam of ſulphur, one dram. Grind the quickſilver with the balſam of ſulphur, till the

former diſappears totally; warm the lard, and add it by degrees, and mix the whole thoroughly.

The patient is to perſiſt in the uſe of the ointment ten or twelve days, during which time he ſhould be extremely cautious not to catch cold, and in caſe it ſhould occaſion a ſoreneſs of the mouth, he ſhould diſcontinue it occaſionally, and take the laxative potion firſt above preſcribed.

After this, the following may be adminiſtered to compleat a cure.

Take of rhubarb powdered, two drams—of the compound powder of gum tragacanth, three drams—of balſam of capivi enough to make an electuary, of which the quantity of a nutmeg may be taken twice a day.

Some, inſtead of the mercurial bolus and unction, preſcribe the following.

Take of quickſilver, one ſcruple—of mucilage of gum Arabic, as much as will extinguiſh the globules of the quickſilver—of precipitated ſulphur of antimony, two ſcruples. Make ſixteen pills, two of which are to be given morning and evening till the whole are taken.

Take of quickſilver, half an ounce—of mucilage of gum Arabic, four drams. Mix them well, and adding ſix ounces of barley water, make an injection, to be uſed twice a day.

Freſh infection is alſo ſaid to have been removed from female patients, by waſhing with milk and water, injecting ſweet oil, or oil of almonds; and after a few doſes of manna and ſalts, or other gentle opening phyſic, uſing the following injection twice or three times a day.

Take of corroſive mercury ſublimate, half a ſcruple; diſſolve it in a pint of water. Of this ſolution, mix two drams with four ounces of water, and inject twice a day.

After the running and heat in making water are ſomewhat abated, ſome adviſe a grain of the ſublimate to be diſſolved in an ounce of mint water, and taken twice a day; and depend on this medicine for the completion of the cure, varying the quantity in the different ſtages of the diſeaſe.

The following is alſo recommended, to be uſed from the firſt appearance of the infection, and continued till the cure is compleated.

Take of the balſam of capivi, two drams—of the compound ſpirit of lavender, one ſcruple. Mix, and give from eighty to one hundred and twenty drops in a glaſs of water, three times a day, once after each meal.

After this medicine hath been repeated a few days, the following injection, the drops being alſo continued.

Take of white vitriol, one ſcruple—of *lapis calaminaris*, five grains—of water, two ounces and half. Mix and inject.

Or, take of verdegriſe, one ſcruple—of oil of ſweet almonds, two ounces. Mix for an injection.

The following is alſo adviſed as a preventive when infection is apprehended.

Take of the common ſtrong cauſtic, one dram; diſſolve it in a pint of water, and filter it through paper. Mix as much of this ſolution in a tea-cupful of water as the mouth can bear without pain, and with this diluted liquor fill a ſyringe, and inject into the *urethra* (or *vagina*) and retain it there for about half a minute; then add to the remainder of the liquor a tea-ſpoonful of the ſolution, and waſh all the external parts about the glands of the penis, or of the pudenda. After all, inject milk and water, and waſh all the external parts with it.

Others recommend the early uſe of an injection of the following compoſition with gentle cooling purges, and are of opinion that in recent caſes, where the ſymptoms are not violent, a cure may be effected by theſe means alone.

Diſſolve one ſcruple of ſugar of lead in five ounces of roſe water; warm it, and inject five or ſix times a day with a proper ſyringe.

If the inflammatory ſymptoms are violent, bleeding may be neceſſary, and the repetition of this operation muſt be governed by the circumſtances which attend the diſorder.

Diuretics are alſo uſeful in the early ſtages of this diſeaſe; for this purpoſe one part of nitre, and two of gum Arabic, may be reduced to powder, and well mixed, and of this mixture the quantity of a dram may be taken frequently in the patient's common drink: if the operation of this medicine ſhould be too violent, the quantity may be leſſened, or the whole omitted; and equal parts of gum Arabic reduced to powder, and cream of tartar, may be ſubſtituted, and a tea-ſpoonful given two or three times a day in the ſame manner.

Emollient clyſters may alſo be uſeful where the inflammation and pain extend to the neck of the bladder, anſwering the double purpoſe of procuring ſtools, and acting as a fomentation to the parts inflamed.

Inſtead of the laxative medicines already preſcribed, any of the following may effectually anſwer the purpoſe of opening the body, which ſeems to be the only evacuation of this kind neceſſary.

To a pint of the infuſion of ſenna, add one ounce of tamarinds. Stir it well, and let it ſtand till the morning; then ſtrain it off, and diſſolve in it half an ounce of Rochelle ſalts. Divide this into four parts, one of which may be taken every hour till it produces a ſtool.

Or, take of the lenitive electuary, two ounces —of jalap powdered, one dram—of rhubarb powdered, one dram—of cream of tartar, one ounce—of the ſolutive ſyrup of roſes, enough to make the whole into an electuary; of which one, two, or three tea-ſpoonfuls, may be taken at night, and the like quantity the following morning, as often as occaſion may require.

When the gonorrhœa is in a very inflammatory ſtate, and the pains acute, bladders of warm water, or fomentations, may procure immediate relief; or poultices of bread, milk, and oil, or of the flour of linſeed, may be applied to the parts for the like purpoſe.

A proper ſupport for the ſcrotum or teſticles will be of conſiderable uſe in the prevention of inflammatory ſymptoms; a truſs of this kind is recommended to be worn from the firſt appearance of the diſeaſe.

And under the treatment laſt mentioned; that is to ſay, waſhing the parts affected by injections of milk and water and oil, reducing feveriſh ſymptoms by regimen and due evacuations, and fomentations or poultices; this diſeaſe will ſometimes go off without the aſſiſtance of mercury: at any rate it ſhould by no means be uſed in the early ſtage of the diſeaſe, when it is for the moſt part rather injurious than beneficial.

But if, after ſuch a courſe, the diſcharge remains unabated and unchanged in colour and conſiſtence, though the pains are leſſened, the difficulty of making water relieved, and the nocturnal erection leſs troubleſome, ſmall quantities of mercury may be given; if the common mercurial pill is adminiſtered, one, or at moſt two, at night, and one in the morning, will be ſufficient; and proper attention muſt be paid to the effect theſe medicines produce on the mouth: if they render it very ſore, the quantity ſhould be leſſened, or the uſe of it remitted; if they occaſion no alteration or uneaſineſs in the mouth, the doſes ſhould be increaſed till it is in a ſlight degree ſore.

Or the following bolus may be ſubſtituted for the mercurial pills.

Take of calomel, two grains—of conſerve of hips, enough to make a bolus; to be taken at night. The quantity of calomel to be increaſed to ſeven or eight grains, according to the directions given reſpecting the mercurial pills.

In the adminiſtering mercury for this diſeaſe, regard muſt be had to it's operation, ſo as to avoid a ſalivation, which is unneceſſary; and this may be done, either by regulating the doſes, or by intermitting the uſe of them: ſome patients will bear the ſame quantities every day without inconvenience, whilſt others will be as highly affected by them, though taken only every other day.

If mercurials ſhould produce gripings or purgings, it will be neceſſary to give the infuſion of ſenna, or ſome other laxative, and the patient ſhould be directed to drink plentifully of water-gruel: when the bowels are weak, mercury is ſometimes apt to occaſion bloody ſtools, and other diſagreeable ſymptoms, which may be prevented by taking a gentle opiate, ſuch as a ſcruple or half a dram of Venice treacle, or of the japonic confection.

Inſtead of other mercurials, the corroſive ſublimate is given with very good ſucceſs in the following form.

In four ounces of French brandy, diſſolve two grains of corroſive ſublimate. Of this ſolution a table-ſpoonful may be taken morning and night, waſhing down the former doſe with two or three diſhes of tea, and the latter with a draught of whey or milk and water.

Thoſe who diſlike to ſwallow a pill or bolus, may take mercury in the following form.

Take of quickſilver, half a dram—of gum Arabic, reduced to a mucilage or jelly, one dram. Rub the quickſilver with the mucilage till the globules of the former diſappear totally; then add gradually, continuing to mix, two drams of balſamic ſyrup, and four ounces of any ſimple water.

Of this ſolution, from one table-ſpoonful to two may be taken night and morning, obſerving the effect, as in other forms of adminiſtering mercury.

And where the bowels are ſo tender, that they are unable to bear mercury internally, it may be applied externally with equal efficacy; and, in ſome caſes, this method of uſing it is attended with advantageous conſequences. A dram of the common mercurial ointment, mentioned in the former part of this chapter, may be rubbed in on the inſides of the thighs at night, before a fire; and the ſame repeated every evening, or every other evening, according to circumſtances and the effect of the medicine: the patient ſhould, on account both of cleanlineſs and warmth, wear flannel drawers whilſt he perſiſts in this operation. The length of time during which the uſe of mercury, either taken inwardly or externally applied, is to be continued, muſt depend on the ſymptoms; it ſhould however be perſevered in till the virulent matter is apprehended to be totally expelled.

The uſe of the mercurial ointment will alſo ſometimes bring on a return of the fever, inflammation, and heat, and in other inſtances will occaſion a ſore mouth and gums, and a fœtid breath; in either of thoſe caſes it will be proper to omit the rubbing, and adminiſter a doſe or two of ſome cooling laxative; but as ſoon as theſe ſymptoms diſappear, the rubbing in of the ointment muſt be reſumed, though the quantity may be leſſened, and longer intervals allowed; and, during the uſe of this or any other mercurial courſe, the patient ſhould obſerve a proper regimen, both with regard to food, liquors, and exerciſe.

By the want of caution in theſe particulars, the cure of this diſeaſe is frequently protracted, and the conſtitution conſiderably injured.

When, in conſequence of the laſt preſcribed mode of treating the gonorrhœa, the ſoreneſs and heat are gone off; when the quantity of the diſcharge is leſſened, and the priapiſm no longer troubleſome; and when the matter becomes of that colour and conſiſtence which, as before deſcribed, denotes the laſt ſtage of the diſorder; gentle agglutinants or aſtringents may be admitted, but ſtill with much caution, as many of the dreadful ſymptoms which we ſhall hereafter mention will follow an injudicious or haſty check of the diſcharge: if, however, from imprudence, any new complaint ſhould occur, the return of the running muſt be encouraged by purging medicines, and the courſe of mercury muſt be renewed.

When, however, aſtringents are proper, the following medicine is recommended.

> Take of lenitive electuary, one ounce—of the balſam of capivi, ſix drams—cream of tartar and rhubarb in powder, of each two drams—ſyrup of roſes, as much as will make the whole to an electuary; a teaſpoonful of which may be taken morning and night.

If this ſhould fail to produce the deſired effect, and occaſion no diſagreeable ſymptoms, Venice turpentine, or balſam of Peru, may be uſed in moderate quantities: or if theſe medicines ſhould diſagree with the patient's ſtomach, a tea-cupful of the infuſion of the bark may be taken twice a day, with from ten to twenty drops of the acid elixir of vitriol, or the ſame number of drops of the elixir may be adminiſtered in a glaſs of Port wine.

Aſtringent injections may alſo be uſed when all appearance of virulency is at an end; for this purpoſe that which we have before preſcribed, compoſed of ſugar of lead and roſe-water, will be proper.

But ſome writers preſcribe a mode of treatment ſo totally different from thoſe we have already laid down, that we think it neceſſary to ſtate it with accuracy.

According to the opinions of theſe writers, bleeding and purging are both pernicious: the former, becauſe a ſupply being neceſſary to fill the emptied veſſels, an abſorption of the virus or infected matter from the external parts would neceſſarily take place for that purpoſe; and the latter, becauſe, although it might ſerve to empty the bowels, and drain the maſs of blood, yet the ſtimulus or active operation of theſe medicines would increaſe the ſpaſm in the ſyſtem, and retain the acrimony which ought to be expelled by urine and perſpiration, and occaſion a revulſion of the infected matter to the internal parts of the body.

Inſtead of the uſual evacuations, the following preſcription is recommended.

> Take of purified nitre, two ounces—of cinnabar of antimony, two drams—of calomel, one ſcruple. Rub the cinnabar and calomel together on a marble, with a ſmall quantity of water, until it becomes a perfectly fine powder; then add the nitre, rubbing it in like manner, but without water, till it is well mixed. Divide the whole powder into twenty-four equal parts, two of which are to be taken at proper diſtances every day, or occaſionally, as circumſtances may require, either made into a draught with any ſimple water, and ſweetened with the balſamic ſyrup, or in a bolus mixed with any proper vehicle.

In the operation of this powder, the nitre is intended to promote gentle perſpiration and urine, the cinnabar to act as an antiſpaſmodic and to relax the conſtriction of the fibres, and the calomel to correct the acrimony in the blood.

As this powder may probably occaſion gripings, the patient is adviſed to diſſolve in the draughts in which it is mixed a lump of ſugar which has firſt received two or three drops of the eſſential oil of peppermint, which will prevent this complaint from being troubleſome.

The immediate ſeat of the diſorder is next to be the object of conſideration; and this is in men generally about two or three inches up the urethra, but in different parts of the pudenda in females.

The diſorder ſo ſituated conſiſts of one or more ſmall ulcers, for the cure of which, and conſequently the removal of the whole complaint, the following injection is directed.

> Take any quantity of calomel, and reduce it in a marble mortar to ſo very fine a powder that it may readily ſuſpend in water; then put it into a proper veſſel, pour a large quantity of water on it, and let it be well ſhaken: after this let it ſtand till the water is perfectly clear, then pour it off carefully, and let the calomel dry by degrees. One ſcruple of this powder may be mixed with an ounce of water, and kept in a phial for uſe.

When the injection is to be applied, which muſt be once, twice, or thrice a day, according to circumſtances, let the phial be well ſhaken, and let the patient always make water immediately before he injects; a ſmall quantity at a time will be ſufficient, which, by holding the prepuce cloſe, ſhould be kept in as long as poſſible, permitting it to ſurround the crown of the glans before it is ſuffered to get out: if the urethra is ſore, or the glands in an inflammatory ſtate, as in young ſubjects and thoſe who are unuſed to the diſorder is frequently the caſe, the pipe of the ſyringe is directed to be rubbed with a little mercurial ointment to make it paſs the more eaſily.

And by the uſe of this injection, thoſe who recommend this treatment aſſert, that a virulent gonorrhœa, or recent clap, may be effectually and radically cured in a much ſhorter time than by means of any medicines internally adminiſtered, and with at leaſt equal ſafety and certainty.

Nor do thoſe who recommend this injection confine it's efficacy to the mere caſe of which we now treat; on the contrary they contend, that it may be applied with ſucceſs to all ſcrophulous fiſtulas in every part of the human body; aſſuaging the moſt gangrenous inflammation, by the ſame action of correcting the acrimony of the fluids, relaxing the ſpaſmodic conſtriction of the ſolids, blunting the edge of the moſt corroding and putrid humours by it's antiſeptic and antacrid qualities, and changing the moſt acrimonious diſcharges into mild and well-digeſted matter; and that as this medicine is freed from the ſtimulating ſaline particles of corroſive mercury, it acts gently, and is abſorbed in the animal acrimony without producing any perceivable irritation in the ſyſtem.

Neither is the patient reſtrained from the uſe of this injection in any ſtage of the diſorder: it is indeed adviſed to apply it as early as poſſible, becauſe it will, without doubt, remove this malady more eaſily and expeditiouſly at it's commencement than in the progreſs of the diſeaſe, when the ſymptoms are become more aggravated; it is alſo recommended as a certain and innocent preventive.

And inſtead of aſtringents, and as a reſtorative to recover the tones of the genital organs, and of the whole ſyſtem, after the gonorrhœa has been cured by the uſe of the antiſpaſmodic powder and injection, the following medicine is preſcribed.

> Take of the Canada balſam, three ounces—of gum guaiacum, half an ounce—of rectified ſpirit of wine, one pint. Let it digeſt in a moderate heat for a week, ſhaking it frequently; at the end of this time, when it is perfectly ſubſided, either pour or ſtrain it off fine. To this tincture add two drams of eſſential oil of peppermint, and give a tea-ſpoonful twice or thrice a day in a glaſs of wine or ſimple water, ſweetened with the balſamic ſyrup.

We have now offered various courſes of medicines and preſcriptions for the cure of this diſeaſe, as they occur in common practice, or have been extracted from the writings of phyſicians eminent for knowledge, and diſtinguiſhed for practical experience:

we ſhall now ſubjoin our own opinion, founded as well on a judgment formed upon repeated experiments, as upon the common principles of reaſon, in concurrence with a due conſideration of the nature of venereal diſeaſes, and their operations and effects on the human body.

We have the beſt reaſons to approve of the earlieſt attention to the apprehenſions of infection, and of the injection preſcribed to be uſed as a preventive when ſuch ſuſpicions ariſe.

On the firſt appearance of a diſcharge, frequent waſhings with milk and water, and injections of oil of ſweet almonds or olives, are of great importance; in the very early ſtages of the diſorder, the complaints are conſiderably leſſened, and the cure half compleated, by attention in theſe particulars.

And at this time we have no doubt but the injection of calomel and water may be uſed with great propriety, and with the ſtrongeſt probability of obtaining by it a compleat and perfect cure.

But we do not wholly agree with thoſe who recommend this injection, in the neceſſity or uſe of the antiſpaſmodic powder, ſo confidently urged as an indiſpenſible accompaniment of the injection; we are rather inclined to diſapprove of the early adminiſtration of mercurials internally, before the heat and other inflammatory ſymptoms are conſiderably leſſened.

And for this purpoſe we conceive, that gentle evacuations are of great advantage; the bleeding to be determined entirely by the ſymptoms, and the purges to be of the mildeſt kinds.

We apprehend aſtringents ſhould by no means take place whilſt the ſmalleſt token of virulence remains, nor ſhould any others, but ſuch as are of very gentle operation, be at any time admitted.

Nor do we believe that the injection may be uſed with equal advantage in every ſtage of the diſorder: before it has made any conſiderable progreſs, it may be relied on; and though we are not equally confident of it's ſucceſs, unaſſiſted, in the advanced ſtate of the diſeaſe, yet we are of opinion it may even then be uſed with good effect, accompanied by internal medicines.

The ſyſtem which we would recommend in the treatment and cure of this diſeaſe, differs in ſome meaſure from all the preceding; yet as it is derived in part from a coincidence with the opinions and doctrines of others, and as the remainder is the reſult of long experience, we truſt it will be found effectual for the purpoſe of eradicating this ſpecies of venereal infection, and venture to offer it as a ſafe, certain, and eaſy cure, for the virulent gonorrhœa or recent clap.

If the infection hath been ſo effectually communicated as to baffle the preventive powers of the injection preſcribed for that purpoſe, recourſe ſhould be immediately had to the injections of milk and water and oil: in every ſtage of the diſorder cleanlineſs is of great importance; but on it's firſt appearance it is ſo eſſential, that much of the virulence or mildneſs of the future ſymptoms depends on perfect circumſpection that the diſcharge be not ſuffered to remain, if it can be poſſibly prevented, a ſingle moment on the parts affected.

If there are any extraordinary inflammatory ſymptoms, bleeding, and even a repetition of the operation, may be neceſſary; but the uſe or omiſſion of this evacuation depends ſo much on different circumſtances, that it cannot be preſcribed poſitively, without an actual examination of the patient's ſituation.

But in all caſes opening medicines are proper; and though we diſapprove of ſtronger purges, except in very particular caſes, yet manna, ſenna, tamarinds, rhubarb, cream of tartar, and the like mild laxatives, ſhould be adminiſtered at leaſt three or four times, oftener if neceſſary, in the firſt eight or ten days after the ſymptoms are evident.

At the ſame time we would recommend the conſtant uſe of the calomel injection, as before preſcribed, with a mild, cooling, and opening diet, an abſtinence from all liquors of a heating quality, and a forbearance of any violent exerciſe.

If by theſe means the ulcers are healed, the diſcharged matter brought to a good colour and conſiſtence, and all the ſymptoms of infection removed, the cure may be compleated by the gentle aſtringent electuary and injection before preſcribed, or the uſe of the bark with the cold bath.

But if the diſeaſe ſhould be obſtinate, and refuſe to give way to the injection, a circumſtance which we apprehend will very ſeldom occur, either of the internal courſes of mercury herein before preſcribed may in that caſe be reſorted to, after moderate evacuations, and the cleanſing and ſoftening injections.

Hitherto we have treated of the gonorrhœa under it's moſt mild and benign appearance, unattended with thoſe troubleſome and alarming ſymptoms, which ſometimes, for a while, baffle the ſkill of the phyſician, and the operations of internal and external applications, rendering the cure tedious and difficult; when theſe ſymptoms unfortunately occur, different treatment is required, which will be conſidered in ſubſequent chapters.

But, before we cloſe the preſent ſubject, it may be neceſſary to caution thoſe, who are by imprudence or misfortune the victims of this diſeaſe, againſt indulging themſelves in libidinous pleaſures before the cure is perfectly compleated; from impropriety of conduct in this particular, the cure is not only protracted, but ſymptoms are induced which would otherwiſe never appear; the conſtitution is racked, and the habit injured by a continuance of the diſcharge, and doubts are perpetually ariſing of freſh and accumulated infection.

But ſtronger arguments than theſe may be uſed to deter mankind from ſuch deſperate acts: whoever willingly or knowingly communicates this diſeaſe, puts the life of another in danger; and however lightly ſuch a matter may be treated upon a tranſient view of it, it will, on maturer conſideration, be found to be a crime of a very deep dye; a crime by which the perpetrator may eventually incur no ſmaller degree of guilt than that of actual *murder*.

CHAP. II.

Of Shankers and Buboes.

IT has been held that *ſhankers* or *chancres* are not certainly venereal, but may attend without a gonorrhœa or other venereal taint; they are in ſome inſtances ſaid to be an original diſeaſe, but are much more commonly ſymptomatic of a gonorrhœa, or a confirmed pox.

They ſometimes make their appearance within the inflamed prepuce, and ſometimes are ſcattered over the whole glans; but are chiefly found behind the crown, and near the *frænum* or ſtring which draws back the prepuce, in men; in women they are commonly ſeated within the lips of the pudenda.

They approach at firſt like a little eryſipelatous inflammation with itching; this is followed by one, and ſometimes ſeveral, ſmall puſtules, filled with a tranſparent fluid, and in ſome inſtances becoming white; theſe break and form a ſmall but ſpreading ulcer, painful and inflamed, and penetrating ſometimes ſo deep as to corrode arteries and veins, and even occaſion dangerous hæmorrhages; however, the lips of theſe ulcers gradually become callous, and the middle is filled with a ſhining or gloſſy matter, which frequently changes to a dirty white, and ſometimes inclines to green.

The lips of theſe ulcers never appear ſwelled or turned out, but rather contracted, ſmooth as if poliſhed, and of a pale or aſh-colour; the ſurrounding caloſity about the edges of theſe ulcers diſtinguiſhes them from all others, and this hardneſs is ſaid to be occaſioned by a coagulating quality in the venereal infected matter.

Theſe ulcers are of a cancerous kind, and will ſeldom yield to any other applications than mercurials; they are likewiſe peculiar to glandular ſubſtances, and from the ſimilarity in the ſtructure of the fauces or entrances of the gullet, and the parts of generation, it is a very common caſe in venereal habits, for ſhankers or ulcers of the like kind to appear in the throat, as well as in the mouth, tongue, and other neighbouring parts, where they may do much miſchief if they are not attended to in ſeaſon.

Cauſtics were formerly applied to eradicate theſe ulcers, but the uſe of them is now with great propriety generally laid aſide; when the numbers are conſiderable, and attended with great inflammation, fomentations or emollient poultices may be uſeful to reduce the inflammatory ſymptoms, and prepare for the uſe of mercurials.

The common mercurial ointment is uſually applied to dreſs theſe ulcers, which is ſpread on doſſils of lint, and the dreſſings changed once in twenty-four hours.

But the following cerate is recommended, as poſſeſſing the higheſt antacrid, cleanſing, and healing qualities.

Take of red corroſive mercury, two drams—of calomel, one ounce—of ſugar of lead, half an ounce—of white wax, two ounces—of olive oil, three ounces—of eſſence of bergamot, ten drops. Let the red corroſive mercury and calomel be rubbed together on a marble, with a ſmall quantity of water, till the whole is reduced to a very fine powder; having mixed this with ſugar of lead, rub it again till it is perfectly fine: melt the wax with the oil over a ſlow fire, ſprinkle in the powder, ſtirring it while this is doing, then add the eſſence, and continue to ſtir till it is cold.

This cerate is very warmly recommended, not only in venereal caſes, but in all ulcerations and cutaneous eruptions; and the uſe of it adviſed on any part of the body, rubbed in on the ſkin in eruptive complaints, and applied on doſſils of lint to ulcers or wounds: but great care and caution is neceſſary in the admiſſion of this or any other external application, in diſeaſes of the ſkin which are not manifeſtly of the venereal kind.

Buboes are ſwellings or tumors in the inguinal glands or groin, and are occaſioned in general by the lymph or fluid in the glands, which are the ſeat of this diſeaſe, being thickened by the venereal virus or infected matter, by which means ſecretion in them is at firſt rendered difficult, and at length impoſſible.

Theſe tumors are common attendants on a confirmed pox; when they appear in caſes of recent infection, they are for the moſt part cauſed by a ſuppreſſion or check of the diſcharge of a gonorrhœa, which may happen from exceſſive evacuations, a violent cold occaſioning obſtructions, and various other circumſtances.

The firſt ſymptoms of an approaching bubo, are a ſmall tumor like a kernel in the glands of the groin, generally attended with a dull pain and ſtiffneſs; the ſwelling, which does not at firſt ſeem larger than a pea, gradually increaſes in ſize, but is attended with no external inflammation or remarkable ſoreneſs; yet if it is handled, it immediately becomes more painful, and the ſtiffneſs is augmented: by degrees more or leſs ſlow, this kernel arrives at the bigneſs of a hazel-nut, and then the pain is felt more ſenſibly, with intervals of throbbing; and the whole body becomes affected with inflammatory ſymptoms, ſuch as wearineſs, diſinclination to motion, pains in the limbs, head-ache, and thirſt.

The patient now begins to complain of indiſpoſition; and if at this period proper remedies are applied, the bubo ſoon diſperſes; but if, from deſign in the treatment or habit of body, it inclines to ſuppuration, the tumor, together with the pain and other ſymptoms, increaſe, till the ſwelling ſometimes reaches the ſize of a pigeon's or even an hen's egg; when it becomes more inflamed, takes a red or bluiſh caſt, and then the matter begins to form, and may ſoon be felt in an actual ſtate of fluctuation.

Being arrived at maturity, the tumor changes it's appearance, the ſymptoms of inflammation abate, the tenderneſs ſubſides in a certain degree, a protuberance is perceivable which becomes ſoft, and this part is in general the leaſt painful, and diſtinguiſhed in colour from the others, inclining ſometimes to a yellowiſh.

For the diſperſion of buboes, bleeding has been uſually preſcribed to abate the inflammation, together with gentle cooling purges of manna, Glauber's ſalts, ſenna, rhubarb, or the like; and ſome have recommended the application of leeches to the part.

But the more certain method to get rid of theſe troubleſome gueſts, is the uſe of mercurials, which ſhould take place as early as poſſible, when the taſk will not in general be found difficult; and for this purpoſe, ſome adviſe rubbing the part with as much of the mercurial ointment as the patient can bear without bringing on a ſalivation; and others recommend a plaſter about the ſize of a crown, ſpread on leather with the mercurial ointment, and kept conſtantly to the ſwelled groin, the hair being firſt ſhaved off: and this plaſter will in general remove the complaint without farther trouble.

When the inflammation is, however, arrived at ſuch a height that the formation of matter is expected, poultices of the following compoſition have been recommended, as equally calculated to promote the operations of nature in the diſperſion or ſuppuration of the tumor.

Take of white bread and milk, boiled to a poultice, the quantity of half a pound—of the cooling or anti-inflammatory liniment hereafter mentioned, half an ounce. Mix them well, and apply to the part.

To make the liniment—

Take the extract of lead, mercurial ointment, and the before preſcribed cerate, of each equal parts. Mix them well on a marble.

But others adviſe only a common poultice of bread, milk, and oil, applied warm, with the addition of lily roots, bruiſed onions, or yellow baſilicon, to encourage the ſuppuration, if it proceeds too ſlowly; or if a poultice cannot with convenience be kept on, a ſoft plaſter with galbanum.

If the matter is actually formed, it hath been uſual to indulge the patient in an alteration of diet, and to permit him to live more generouſly, and drink a glaſs of wine, as uſual in health; but this is a liberty we cannot approve of, becauſe it does not appear to be founded on any reaſon: it ſeems totally impoſſible to draw the whole venereal infection from the body this way; nor will the greateſt or longeſt continued diſcharge from a bubo eradicate this diſeaſe from other parts, where it has taken place, without the aſſiſtance of other remedies; and therefore we are of opinion, that the more ſpeedily theſe tumors can either be diſperſed or brought to ſuppurate, opened, and healed, the more it will be for the patient's advantage, as it is certainly leſs diſagreeable, troubleſome, and dangerous, to deal with one enemy than a multitude; nor is it conſiſtent with common ſenſe, to prefer diſcharging the virulent matter through a painful ulcer to the carrying it off in the uſual way.

When, therefore, the tumor is arrived at maturity, and the matter compleatly formed, it ſhould be opened as ſpeedily as is conſiſtent with prudence, either by the knife or cauſtic; though, as the former is attended with leſs pain, and the wound more readily diſpoſed to heal, than that which is made by eſcharotics, we do not heſitate to recommend this method where it can poſſibly be practiſed: after the bubo has been opened, it may be dreſſed, and treated in all reſpects as other ulcers, though the cerate before deſcribed is ſaid to anſwer every purpoſe of cleanſing it, keeping down fungoſities or proud fleſh, and healing the wound.

In men of relaxed habits, and women, buboes generally come on more rapidly than in men of ſtrong, vigorous, and robuſt conſtitutions: when theſe tumors attack the female ſex, they are at firſt attended with little pain, but ſoon become large, troubleſome, and full of matter; and in thoſe habits, whether they break of themſelves, or are opened judiciouſly, they ſoon heal again under proper management.

CHAP. III..

Of the Phimoſis and Paraphimoſis, Chordee, and Priapiſm.

THE *phimoſis* and *paraphimoſis* have already been mentioned among the ordinary ſymptoms of the virulent gonorrhœa or recent clap; the former generally attends thoſe whoſe glans being wholly covered by the prepuce, it ſwells, increaſes in bulk, and becomes inflamed, and is not only incapable of being drawn back, but ſometimes ſo nearly cloſes at the point of the penis, as hardly to admit the paſſage of the urine, or the diſcharge of the gonorrhœa.

The *paraphimoſis* happens to thoſe whoſe prepuces are too ſhort to cover the glans, in which caſe the inflammation and ſwelling occaſions it to ſhrink, or as it were forcibly drags it back behind the glans, where it becomes contracted, and cloſes upon the penis behind the crown; ſo that it is not only impoſſible to bring it forward, but it adheres with ſuch ſtricture and tenacity, as to increaſe very conſiderably the inflammation of the penis.

When the phimoſis or paraphimoſis are ſuffered to remain long, they are always attended with ſhankers: and in this caſe the phimoſis is moſt troubleſome; becauſe, from the difficulty or rather impoſſibility of getting at theſe ulcers, they become inveterate, and their lips callous and ſtubborn; and ſometimes the whole ſurface within is not only ulcerated, but theſe appearances are communicated to the glans, the crown, and in particular the frænum, or ſtring of the prepuce; which parts in ſome inſtances adhere to the diſeaſed prepuce, and they actually grow together in ſome places, forming behind theſe conjunctions corroding abſceſſes, which either eat through the prepuce, or are obliged to be opened to diſcharge the acrimonious matter contained in them.

The paraphimoſis is a complaint of a ſtill more alarming nature, frequently bringing the life of the patient into imminent danger; the prepuce becoming violently inflamed, contracts itſelf behind the glans, and prevents the reflux of the blood from the penis, by which means that part, as well as the retracted prepuce, ſwells, and each part aggravates the inflammation of the other; ſo that without timely aſſiſtance a gangrene or mortification ſoon comes on, and not only the member, but life itſelf, is hazarded; and though theſe violent ſymptoms do not always occur, yet in general a paraphimoſis is a very troubleſome complaint, concealing ulcers and ſhankers behind the crown, which fretting among the glans, are apt to leave fiſtulas, which ſometimes even penetrate into the urethra. If the paraphimoſis ſhould harden ſo as to become ſcirrhous, the calloſity and habitual contraction occaſion a conſiderable degree of pain, and are extremely inconvenient at times of erection.

Somewhat of the ſame nature occurs in women, but is by no means equally troubleſome; the inflammation and ſtricture to which females are ſubject in the lips of the pudenda, though they frequently occaſion ſhankers within, cannot, from the different conſtruction of the parts, be productive of the ſame diſagreeable conſequences as in men.

The phimoſis generally yields to the application of mercurial ointment; but the following is recommended as a better form than that uſually preſcribed.

Take of purified hog's lard, half a pound—of quickſilver purified, three ounces—of common or diachylon plaſter, one dram. Mix the plaſter with a ſmall quantity of the lard, and rub the quickſilver till the globules diſappear; then add the remainder of the lard, mixing it carefully. A drop or two of oil of rhodium, or eſſential oil of bergamot, will give the ointment an agreeable flavour.

If ſmall quantities of this ointment can be rubbed on the ſwelled, hard, and knotty parts, it will in general diſperſe them, and remove the painful conſtriction; if this cannot be done, poultices in which a ſmall portion of the ointment hath been mixed, will generally anſwer the purpoſe effectually.

Though the paraphimoſis, as has been already obſerved, is frequently attended with very unpromiſing appearances, yet the uſe of the mercurial ointment will in moſt caſes remove this complaint.

The liniment, above preſcribed in the caſe of ſhankers, is alſo very highly recommended, to be ſpread on lint, and wrapped round the paraphimoſis and glans; it is even ſaid to be capable of getting the better of a beginning gangrene, but on account of the lead, is adviſed to be uſed with caution and moderation, and in ſlight caſes the cerate may anſwer the purpoſe; the ſtrength of the liniment may, however, be reduced by the addition of vinegar which readily intermixes, and in this way it may be adapted to all circumſtances.

When the ſwelling of the prepuce or lips of the pudenda appears to be inclined to fill with matter, (which is ſeldom the caſe, except in very vitiated or emaciated conſtitutions) the following liniment is recommended, the volatility of which may aſſiſt the mercury to penetrate and render it more effectual.

Take of the mercurial ointment, half an ounce—of oil of ſaſafras, ten drops—of camphire, ten grains—of the volatile ſpirit of ſal ammoniac, two drams. Reduce the camphire to a very fine powder by the help of a drop of ſpirit of wine; then add the oil, and afterwards the ointment; and having incorporated theſe ingredients, throw in the volatile ſpirit, and make a liniment.

This liniment may be applied on lint, and will in general take off thoſe diſagreeable appearances.

A *chordee* is a painful contraction of the under part of the penis, which, when it is erected, and only then, is affected diſagreeably with a conſtrictive force, as if it was pulled downward by a ſtring or cord; and the pain is chiefly under the fræqum, and through the urethra.

The *priapiſm*, or involuntary erection, which generally attends the virulent gonorrhœa, is occaſioned by the irritation of that large ſhare of nerves which are diſtributed among the organs of generation.

A priapiſm is in ſome caſes an alarming complaint, eſpecially if it continues any conſiderable time without intermiſſion; for, as the circulation of the blood is in ſome meaſure impeded, the member ſometimes ſwells to a great ſize, is in a very inflamed ſtate, and ſo exquiſitely ſenſible and tender, that the leaſt touch is dreaded: in this ſtate a gangrene in ſome inſtances commences; and if a mortification enſues, the amputation of the member will hardly prevent the moſt fatal event.

Women are ſubject to a ſymptom in ſome meaſure anſwering the chordee in men; this is a conſtriction towards one ſide of the vagina or paſſage from the womb, from which they ſometimes experience a degree of pain, though by no means ſo conſiderable as that occaſioned by the correſponding ſymptom in the other ſex.

When the other ſymptoms of inflammation abate, the priapiſm and conſequent chordee will of courſe ſubſide; but when it is violent, and the inflammatory conſtriction is general, it will require other aid beſides external applications: in this caſe, if the habit is full and ſanguine, bleeding will be proper, and an opiate may be given at night; clyſters alſo are of uſe, and the patient ſhould obſerve a low and cooling regimen.

When by theſe means the inflammation is ſomewhat reduced, the mercurial ointment may be rubbed in along the duct of the urethra, or the cooling or anti-inflammatory liniment, herein before preſcribed, may be uſed with great hopes of ſucceſs.

CHAP. IV.

Of the Strangury, Swelled Teſticles, and of Venereal Excreſcences.

THE increaſe of the titillating ſenſations on the approach of the gonorrhœa, is generally attended with a weeping of watery matter from the urethra in men, and from the pudenda in women, which brings on gradually a *ſtrangury*, or difficulty of making water.

At firſt the urine paſſes oftener than uſual, with a remarkable titillation, which degenerates by degrees into a ſharp and burning pain, and which is more particularly felt after the water has been evacuated; the urine now acquires a higher colour in different ſhades, from a ſaffron tinge to that of ſtrong beer; as the colour riſes, the quantity is diminiſhed, but the diſcharge is of ſo acrimonious a nature, that it occaſions a perpetual irritation to urine, though the patient is ſcarce able to bring off a ſpoonful at a time, and that ſo corroſive, that the pain in voiding it is almoſt inſufferable.

Women ſuffer leſs in this complaint than men, which ariſes from the different ſtructures of the urinary organs; and thoſe who are of ſtrong and robuſt conſtitutions, and in high health, are in general more ſubject to it than thoſe of relaxed and delicate habits.

As long as the patient can retain his urine ſome time, though it is attended with heat and pain, the ſymptom is called *a difficulty of making water*; but when the neck of the bladder is remarkably affected by the pain, and it extends to the bladder itſelf, and is attended with a conſtant irritation and inclination to make water, which yet is diſcharged in ſmall quantities with great pain, the complaint is ſaid to be a *ſtrangury*.

But a total *ſuppreſſion* or *ſtoppage* of urine, which ſometimes happens, is a caſe of extreme difficulty and danger; and if the kidnies ſhould be ſo far affected by the virulent infection, as to excite inflammation and prevent the ſecretion of the urine, great apprehenſions will ariſe of very fatal conſequences.

The former caſes are not often attended with very conſiderable danger, and the complaints may moſt commonly be removed by the courſes of medicine and treatment which apply to the gonorrhœa generally; ſhould the latter ſymptom prevail, the uſe of bougies and the flexible catheter may be neceſſary.

Of the various compoſitions of bougies, the following is offered as the preſcription of Mr. Daran, a French ſurgeon, who is ſaid to have made conſiderable improvements in the formation of theſe machines.

> Take of virgin wax, eight ounces—of ſpermaceti, three ounces—of hog's lard, two ounces—of olive oil, one ounce—of ceruſe, ſix drams. Boil the ceruſe and oil together in a pipkin with water, till they unite into one body; and then having melted the other ingredients together, add it to them.

The bougies muſt be made up of different ſizes, from the bigneſs of a knitting-needle to that of a gooſe-quill, in the following manner. Spread with the compoſition pieces of ſoft linen rags or cloth of any dimenſions, and cut them out into ſlips from ſix to ten inches long, and from half an inch to an inch broad; or, as the end of the bougie which is firſt to enter the urethra is required to be ſomewhat ſmaller than the other parts, the ſlips may be cut a little tapering; and theſe ſlips, with the ſide which is ſpread outward, muſt be ſmoothly and dextrouſly rolled on a glazed tile, or poliſhed marble ſtone, to the form of a taper or wax candle.

But if theſe bougies are required to be corroſive, melt an ounce of the compoſition, and add to it a dram, more or leſs, according to the circumſtance, of red precipitate, and dip the narrow end of the linen for about the ſixth part of an inch in it; and when this is cold, proceed to ſpread the remaining part of the linen, and to form the bougies as above directed.

In this way the ſame compoſition will anſwer a double purpoſe, by omitting or adding the red precipitate; which, if a ſtill more active eſcharotic is wanted, may be changed for the corroſive ſublimate; and the pointing the end of the bougie only with this acrid matter, is attended with the obvious and important advantage of avoiding the irritation and corroſion, which bougies ſpread in every part with the cauſtic matter, muſt neceſſarily occaſion in the whole length of the urethra.

When, from neglect or ill treatment, the urethra is filled with carnoſities, which are become ſo callous as to render the introduction of the catheter difficult, the following compoſition is recommended for the bougies.

> Take of mercurial plaſter, one ounce—of the beſt ſhell-lac powdered, fifteen grains—of Venice turpentine, half a dram—of calomel, prepared as directed for the injection, one dram—of red corroſive mercury prepared in like manner, ten grains. Melt the turpentine over a gentle fire, throw in the lac, and incorporate them; then add the plaſter, and laſtly the calomel and corroſive mercury. Mix the whole well, that it may not ſeparate; ſtirring it briſkly, leſt it ſhould catch.

With this compoſition, inſtead of the above, ſpread the linen rags, and proceed in the ſame manner to make it into bougies.

Of all the effects produced by venereal infection, there is hardly one more diſpiriting than the *hernia humoralis*, or *ſwelled teſticle*: nor is the dejection occaſioned merely by the pain, though that is generally exquiſite; but the conſequences which may be apprehended from this complaint are of a nature ſo alarming, as to be dreaded by thoſe poſſeſſed of the greateſt degree of fortitude.

The ſame cauſes which produce buboes, may alſo occaſion ſwelled teſticles, and the termination of both complaints is alike uncertain; but this caſe is always attended with very conſiderable pain, difficulty, and uncertainty.

Of all the organs, none is ſo exquiſitely delicate, ſo curiouſly and elaborately compoſed, or ſo ſenſible and ſo ſubject to excruciating pains, as the teſticle: a blow or contuſion on the teſticles is attended with ſuch changes of countenance, as are ſufficiently expreſſive of the torment it occaſions; and if a gangrene or mortification follows ſuch an accident, as is too often the caſe, if effectual remedies are neglected to be ſpeedily applied, nothing leſs than an extirpation of the part will prevent the patient's meeting his fate in twenty-four hours, and even this expedient is not always ſucceſsful.

The firſt ſymptom of this complaint is a wandering, creeping pain, in one or both teſticles, attended ſometimes with intermiſſions or intervals of eaſe; yet the ſenſation increaſes by degrees, and at laſt degenerates into a dull, heavy, and continual pain, with a ſenſe of immenſe weight in the part affected, and ſudden ſhootings and dartings, extending to the lower region of the belly and acroſs the loins.

At this ſtage the teſticle begins to ſwell, becomes inexpreſſibly ſore and tender to the touch, and the weight of it ſo intolerably burdenſome, that, unleſs it is ſupported, the load will be found too oppreſſive both on the patient's ſtrength and ſpirits; and, as the inflammation increaſes, the parts by which the teſticles are ſuſpended partake of the ſame complaints, a fever comes on, a throbbing pain is felt, and the whole ſcrotum is affected with inflammatory ſymptoms.

The criſis is either a diſperſion, ſuppuration, gangrene, mortification, or ſcirrhus; and in this ſtate of the inflammation, one or other of theſe events muſt ſpeedily take place.

If the former can be effected, it will be a happy circumſtance; but for this purpoſe great caution is neceſſary, as well as a ſtrict adherence to regimen and medical directions.

A ſuppuration, though always troubleſome, tedious, and precarious, and apt to form a cancerous or fiſtulous ulcer, will yet in moſt caſes yield to proper management, and with due care a cure may be obtained without any very conſiderable degree of danger; and the approach of matter may always be apprehended, when, after the inflammation and throbbing have continued a conſiderable time, the latter abates, together with the ſoreneſs, though the bulk of the teſticle rather increaſes than diminiſhes, and it begins to ſoften in ſome particular part, and make way for the matter to fluctuate.

The approach of the dreadful ſymptoms of gangrene or mortification can only be foretold by a decreaſe of pain, a torpor or numbneſs of the part, and a ſickneſs or nauſea at the ſtomach; and theſe fatal appearances are much more frequently produced by imprudence or injudicious management, than as a natural conſequence of the venereal infection; to the ſame cauſes may a ſcirrhus be generally attributed, though this malady ſometimes takes place in ſpite of the utmoſt efforts of ſkill and precaution: and in theſe caſes, the only relief that can be expected is by taking off a burden, which is not only uſeleſs but troubleſome; nor is even this operation performed without great pain, difficulty, and danger, ſo that the ſituation of the unfortunate patient who labours under this complaint is truly hopeleſs and deplorable.

The patient's food muſt be low, cooling, and light, and his drinks diluting; for the former ſpoon-meats are moſt proper, and the latter ſhould conſiſt of teas and decoctions of the emollient herbs, whey, and the like; avoiding carefully, both as to food and liquor, whatever is ſpicy, heating, or otherwiſe inflammatory.

The firſt attention muſt be paid to the ſuſpenſion of the part; which may be done by a proper bandage round the middle, and a bag or truſs judiciouſly faſtened to it, in ſuch a way as not to prevent the patient's natural evacuations, or oblige him to looſen it on every ſuch occaſion.

After this neceſſary care, bleeding will be requiſite; and the quantities taken away, as well as the repetition of the operation, muſt be governed by the patient's habit of body, the progreſs of the inflammation, and other circumſtances.

A briſk purge ſhould now be taken, for which the following forms are recommended; though ſome adviſe an aloetic compoſition.

Take of jalap in powder, half a ſcruple—of calomel, three grains—of oil of aniſe ſeeds or peppermint, two drops—of balſamic ſyrup, enough to make a bolus; or it may be made into a draught, if more agreeable, with two ounces of any ſimple water. In either caſe it is to be taken in the morning faſting.

Or, take gamboge and fine ſugar, of each one dram—of calomel, one ſcruple—of oil of cinnamon, two drops. Mix, and reduce the whole to a fine powder, and with a ſmall quantity of water form it into forty pills, rolling each in the powder of factitious cinnabar. Of theſe pills, four taken at night, and three in the morning, will in general prove a ſufficient doſe; but the quantity of both theſe purging medicines muſt be varied according to circumſtances.

If the conſtitution will admit of an emetic, it will in this caſe be of ſingular ſervice; for this purpoſe the following form hath been preſcribed, though others are of opinion, that the powder of ipecacuanha alone is a more ſafe and equally efficacious vomit.

Take of the ipecacuanha root in powder, one ſcruple—of calomel prepared in water, as before directed, four grains. Make a bolus or draught with any fit vehicle; but the quantities in this preſcription are adapted to ſtrong and robuſt habits, and muſt be conſiderably leſſened for a weak or tender conſtitution.

But emetics ſhould not in general be directed till the bleeding and purging have in ſome meaſure reduced the inflammatory ſymptoms.

Poultices of white bread, milk, and oil, are recommended to be applied to the part, or folded rags dipped in Goulard's Saturnine Water to be laid over the inflamed teſticle, and changed as often as they become warm or dry; the common fomentation is alſo frequently uſed in theſe caſes, ſprinkling the flannels as they are wrung out with camphorated ſpirit of wine and ſpirit of ſal ammoniac.

If the ſwelling refuſes to yield to theſe applications, mercurials will be neceſſary; and half an ounce of the mercurial ointment may be mixed with a common poultice, or a leſs quantity gently rubbed in on the part; or a mercurial plaſter laid over the ſcrotum may probably anſwer the purpoſe: the uſe of mercurial medicines internally will alſo be proper as ſoon as the inflammatory ſymptoms are abated, and the patient ſhould be kept as much as poſſible in bed, and upon his back.

If, notwithſtanding all attempts to diſperſe the ſwelling, the formation of matter is unavoidable, the ſuppuration ſhould be encouraged by emollient poultices; and as ſoon as, by the fluctuation of the matter, it appears to be in a proper ſtate, it ſhould be opened with a knife or lancet, for in theſe caſes eſcharotics are dangerous, and tend to injure the teſticle, and prolong the cure; but the operation of cutting muſt be performed with judgment and caution, leſt the teſticle ſhould be touched by the inſtrument, which might prove of fatal conſequence.

After an opening has been made, and the matter is diſcharged, it ſhould be dreſſed and healed in the ſame manner as other abſceſſes; but the lips of the wound will not require to be diſtended by tents, and the cerate before preſcribed is ſaid to be an admirable dreſſing to compleat the cure.

There are alſo certain *venereal excreſcences*, which are frequently extremely afflictive in the very aggravated ſtate of the virulent gonorrhœa, and which are diſtinguiſhed by the ſeveral names of *verrucæ*, *porri*, and *condylomæ*.

The former are a kind of venereal warts, which ſometimes riſe in obſtinate caſes, and are in general tokens of a latent pox: they are of various ſizes and figures, ſometimes ſmooth, and not much larger than pins heads; in others they arrive to the magnitude of a button, and the ſurfaces are rough and unequal. In men they are in ſome inſtances ſingle, and in others ſcattered all over the glands and prepuce: the *clytoris*, prepuce, and internal lips of the pudenda, are the parts where they uſually appear in the other ſex.

When they are conſiderably protuberant, and are leſs at the baſis than the extremities, appearing ſuſpended as it were by a ſtalk, they are called *porri*; and in this appearance of theſe excreſcences they will frequently fall off ſpontaneouſly, but in this caſe they generally ſprout out again almoſt immediately: when they are numerous upon the glans in men, or on the entrance of the vagina in women, they are painful and troubleſome, and eſpecially in coition.

Thoſe excreſcences which are denominated *condylomæ*, ſeem to be large, round lumps, concealed and ſpreading under the ſkin, and are more commonly found in the perinæum, or part between the fundament and privities, the ſcrotum or bag which contains the teſticles, and the tegument of the penis, in men; and in the lips of the vagina or perinæum in women: theſe are rather more difficult to remove than either of the foregoing kinds, rooting themſelves deeper, and not unfrequently burſting into many of thoſe excreſcences, which have been already deſcribed.

If either of theſe warty excreſcences appear jagged and divided like a cock's comb, they are called *criſtæ*; and theſe are chiefly found about the crown and frænum of the penis in men, and under the lips of the pudenda, and about the anus, in women.

The excreſcences hitherto mentioned are of a hardened ſubſtance reſembling warts, and theſe ſometimes appear without inflammation or other inconvenience, and diſappear again without any application; but, as hath been already obſerved, they always return, and ought to be conſidered as warnings of an approaching pox, and proper meaſures ſhould be taken to get rid of them, and avert the impending evil.

There are alſo other venereal excreſcences of a more ſoft and fungous nature, which are in like manner denominated from their appearances; of theſe, ſuch as are ſuppoſed to reſemble the comb of a cock, are called alſo *criſtæ*; if they are thought like unripe figs, *fici*; if ripe ones opened, *mapiſcæ*; when they are compared to mulberries, they are called *mora*; and by a variety of other diſtinctions, according to the real or fancied reſemblances.

And theſe excreſcences are troubleſome about the ſcrotum and perinæum in men, and about the lips of the pudenda, the perinæum, and ſometimes the anus, in women; and the latter caſe happening in either ſex, they are apt to be miſtaken for the piles, from which however they may in general be diſtinguiſhed by the different colours, that of venereal excreſcences being generally livid and cadaverous, and the hæmorrhoids being for the moſt part of a florid appearance; the former will alſo in ſome inſtances have an intermixture of yellow, and each head will ſeem to be filled with a kind of ropy matter, and to yield a thin, fœtid, and bloody diſcharge.

The warty excreſcences, firſt mentioned under the names of *verrucæ* and *porri*, may, unleſs in particular ſituations, be ſafely cut off with a pair of ſciſſars, and the cerate before preſcribed is ſaid to be effectual for the cure; but if they appear to enter beneath the ſurface, ſo that any part of the horny ſubſtance remains after they are divided from the roots, the anti-inflammatory liniment is recommended to be applied on doſſils of lint.

The application of mercurials is the only remedy for thoſe excreſcences which lurk beneath the ſkin; and for the purpoſe of removing them, they may be frequently touched with the ſtrong mercurial ointment, or poultices in which it hath been mixed may be laid on the part; the liniment laſt mentioned is alſo ſaid to be efficacious: and the ſame methods may be purſued with reſpect to thoſe which are of a ſofter and more ſpongy nature, and are highly preferable to cauſtics, corroſives, or ligatures, which were formerly much in uſe, though they were not only attended with immediate pain, equally excruciating and unneceſſary, but with conſequent inflammation, and after all never produced a radical cure, but left the roots to ſhoot out again, and call for a repetition of the ſame torments.

But a perfect cure of theſe diſagreeable ſymptoms is not to be expected from any external applications; mercurial medicines as before directed, muſt be adminiſtered, to clear the ſyſtem of that infectious matter by which theſe excreſcences are produced, and which may in moſt caſes be done effectually by ſome of the courſes heretofore deſcribed, without proceeding to actual ſalivation, which ſhould in all poſſible caſes be avoided.

CHAP. V.

Of Gleets.

UNDER this head we do not mean to confine ourſelves entirely to gleets proceeding from venereal infection, but to conſider alſo the nature and cure of ſeminal gleets ariſing from other cauſes, in men: of the *fluor albus*, or whites, in women, we ſhall treat in that part of this work which is ſet apart for diſorders peculiar to the female ſex.

A *gleet* is generally underſtood to be either the relic of a virulent gonorrhœa, a weakneſs occaſioned by the violence of that diſorder, or ill treatment in the courſe of the cure; or to be produced by latent ulcers remaining in ſome of the parts where the gonorrhœa was ſeated.

In the former caſes the gleet or diſcharge intermits, and differs from the matter of the virulent or infectious gonorrhœa, by being clear, tranſparent, glutinous, and ropy, and this running is perfectly innocent, and conveys no infection by coition; the diſcharge alſo in theſe gleets generally follows any ſuch freedoms with the female ſex as may tend to excite warm ideas; and any violent exerciſe or ſtrain, even that of going to ſtool, will bring it on, but at other times the patient is tolerably free from it.

For the cure of gleets of the laſt mentioned deſcription, aſtringent medicines are directed, and the following preſcriptions may be applied to circumſtances.

Take of gum olibanum, or frankincenſe, and the extract of Peruvian bark, of each one ſcruple—of ſimple ſyrup, enough to make a bolus; to be taken three times a day, drinking after each bolus a glaſs of Pyrmont water, with thirty drops of the saturnine tincture. Continue this courſe ten days.

Or, take of the Peruvian bark bruiſed, one ounce—of freſh galls bruiſed, three drams. Boil theſe about twenty minutes in a quart of water, ſtrain off the liquor, and add to it four ounces of the ſimple tincture of the bark, and give a ſmall wine-glaſsful three times a day; adding to each glaſsful fifteen or twenty drops of the acid elixir of vitriol.

Or, take of the Peruvian bark in powder, three drams—of rhubarb in powder, one dram—of white reſin powdered, two drams —of balſam of capivi, as much as will make the whole into an electuary; of which the ſize of a nutmeg may be taken twice a day, with a glaſs of Pyrmont water, and intermediately forty drops of the following mixture on a lump of ſugar.

Take of the balſam of gum guaiacum, balſam of capivi, and the vulnerary balſam, of each two drams. Mix.

If theſe medicines ſhould diſagree with the ſtomach, the following pills may be ſubſtituted.

Take of rhubarb powdered, half a dram--- of compound powder of amber, one dram and half---of white reſin powdered, one dram---of balſam of capivi, as much as will make the whole into thirty-ſix pills; two or three of which may be taken twice a day.

During a courſe of either of the foregoing medicines, the injection of ſugar of lead and water may be uſed; to which may be added a few grains of white vitriol, as occaſion may require: ſome recommend an injection of the following compoſition, though we apprehend the laſt mentioned is altogether as proper.

Diſſolve half a dram of white vitriol in ſix ounces of water. Put it in a phial, and ſhake it before it is poured out for uſe.

But the moſt effectual remedy in all gleets, where there is no ſuſpicion of remaining virulence, is the cold bath; and this ought never to be omitted, except in caſes of weak or diſordered bowels, or other inteſtines, when it cannot be uſed without danger: if the patient is of a full and ſanguine habit, bleeding and purging may be proper before a courſe of bathing is entered upon; and after theſe precautions, it ſhould be perſiſted in for at leaſt a month. The proper time to bathe is in the morning faſting, and the patient ſhould either plunge into the water over his head, or wet his head the moment he enters it; his ſtay in the water ſhould not exceed two or three minutes, and his ſkin ſhould be immediately rubbed dry with flannels.

The patient's food ſhould in theſe caſes be drying, and his liquors aſtringent; and for this purpoſe the waters of the Spa, Pyrmont, or Briſtol, are recommended, with a mixture of port wine or claret.

But where the gleet proceeds from ſome latent or lurking ulcer, and though the inflammatory ſymptoms are entirely gone off, by means of the infectious particles having loſt their ſtimulating quality, or the affected parts being accuſtomed to their operations; yet, from ſome appearance of the diſcharge, it is apparent that a degree of virulence remains, this caſe requires to be treated in a very different manner from thoſe of which we have laſt treated, for enough of the venereal taint remains, not only to lay the foundation of an univerſal corruption of the ſyſtem, but in the preſent ſtate to communicate infection, and produce by coition as compleat a virulent gonorrhœa, as if the heat of the urine, pain in the urethra, and all the ſymptoms of inflammation, actually exiſted.

And whenever the gleet continues after the uſe of the medicines preſcribed in the former part of this chapter, well-grounded apprehenſions ariſe that it proceeds from ulcers, and the complaint will hardly be removed without having again recourſe to mercury, and ſuch other medicines as are calculated to correct the acrimony of the juices.

To effect this purpoſe, the following preſcription has been offered.

Take of Venice turpentine, half an ounce; boil it till it is of a fit conſiſtence for pills, then add of calomel half a dram. Make the whole into ſixty pills, of which from four to ſix, according to habit and other circumſtances, may be taken morning and night. If the mouth ſhould grow ſore, or the breath offenſive by the uſe of theſe pills, they muſt be diſcontinued for a time, or the number leſſened till theſe ſymptoms are not produced.

During the uſe of theſe pills, a decoction of the woods, ſuch as guaiacum, ſarſaparilla, ſaſſafras, china, or the like, ſhould be drank; to the quantity of a pint and half, or a quart, daily.

Bougies, introduced into the urethra, of ſuch compoſitions as are adapted to the purpoſe, will be of conſiderable ſervice in the cure of ulcers in this paſſage; they will be required to remain there a conſiderable length of time, and may either be rubbed with ſweet oil or mercurial ointment, to facilitate their admiſſion.

A *ſeminal gleet* may ariſe from an exceſſive indulgence of venereal pleaſures, from ſtimulating provocatives, or from a private vice, of a nature equally ſinful and debilitating; it may alſo be brought on by a variety of accidental cauſes, ſuch as very violent labour or exerciſe, lifting weights above the ſtrength of the body, or other ſtrains, even thoſe which happen in voiding the ſtools where the patient is habitually coſtive: violent medicines, ſuch as hot clyſters, ſharp purges, and ſtrong diuretics, may alſo produce this complaint; or it may be occaſioned by epilepſies, convulſions, or involuntary nocturnal emiſſions, whether from dreams or other cauſes.

In the approaches of this diſorder there are no ſymptoms of actual pain, except a weakneſs, and a dull uneaſineſs in the loins and about the neck of the bladder; the ſemen or ſeed paſſes away inſenſibly, and particularly in going to ſtool, or uſing the ſmalleſt force with the body; the erections, though frequent, are not vigorous; and the ſemen is too eaſily ejected, and is thin, and of a blueiſh caſt.

After this diſorder has continued ſome time, the penis becomes heavy and uſeleſs, the teſticles hang lower than uſual, and grow heavy and troubleſome; a pain takes place in the loins and at the lower extremity of the back-bone, which by degrees makes it's way up the back; the calves of the legs diminiſh; the patient's eyes grow dull and weak; he has a ſenſe of weight in his head, and a ringing in his ears; his breath grows ſhort, eſpecially after exerciſe; a ſlow and waſting fever comes on, with continual pains in the head, back, breaſt, and bowels, attended with thirſt and univerſal wearineſs and diſinclination to motion; at length his ſpirits grow dejected, his memory fails, his ſight decays, or an incurable *gutta ſerena* deprives him of it totally; and an hectic cloſes the ſcene.

In the cure of this diſeaſe, regimen and medicine are of equal importance: the diet ſhould be light, cordial, and extremely nouriſhing, and it ſhould be taken frequently, but in ſmall quantities at a time;

the patient ſhould retire to reſt early in the evening, breathe a dry, pure, and mild air, and uſe gentle exerciſe on horſeback or in a carriage.

The medicines ſhould be moderately cordial, and ſuch as increaſe the heat of the body; and generally thoſe which we have already preſcribed in the preceding part of this chapter, to which may be added the preparations of ſteel, and bitters: cold bathing will alſo in this caſe be attended with peculiar advantage.

CHAP. VI.

Of the Lues Venerea, or Confirmed Pox.

THE venereal diſorders, of which we have hitherto treated, are ſuch as, having ariſen from infection recently communicated, are ſuppoſed to be generally confined to the parts where it was received, or to thoſe which are in immediate contact with them: we are now to proceed to another claſs of venereal diſorders ſpringing from poiſon actually received into the blood, and which being carried by the circulation to every part of the body, is mixed with the ſeveral ſecretions, and taints the habit univerſally.

The firſt ſymptom which is felt of this univerſal infection, is a kind of ſlight, irregular intermitting fever, with dulneſs, heavineſs, wearineſs on the ſmalleſt motion, and unuſual oppreſſion of the ſpirits, and this followed by ſlight but increaſing pains in the head, joints, and limbs; the ſymptoms are not conſtant, but are more uſually attendant when the patient is warm in his bed, and where, inſtead of enjoying the comforts of ſleep, he lies reſtleſs, diſturbed, and uneaſy, till, from mere fatigue, he falls aſleep towards the morning, and awakes unrefreſhed and unrelieved.

The head-ache now becomes more frequent and acute, ſometimes affecting different parts of it, and ſometimes fixed to one ſpot, which ſeems as if it was pierced with an inſtrument, and by degrees little lumps are perceivable on the ſkull, and on the bones of the arms and ſhins; the joints alſo grow painful, and the patient is ſcarce ever free from the torment of ſome one or other of the diſagreeable ſymptoms.

A branny ſcurf now begins to gather on different parts of the body, and more particularly on the head, originating generally in the forehead and about the eye-brows, and creeping by the temples throughout the whole ſcalp, and down to the neck; meantime, the eyes are affected with itching, redneſs, ſoreneſs, pain, and ſometimes total blindneſs; the ſcurfy eruption ſpreads farther about the face, and reaching the ears, fills them with ſtinking, ſloughy matter, inſtead of wax, which corroding the organs of hearing, occaſions a tinkling and ringing in the ears, a dull pain in the temples, and a defect in the ſenſe of hearing; as theſe eruptions increaſe in extent and virulence, the corners of the mouth and noſtrils harden and crack, and the lips of thoſe cracks feſter, grow callous and hard, and emit a thin, acrid, and corroſive humour.

As the diſeaſe increaſes, the ſkin of the whole body becomes rough, and covered with a kind of ſcales like bran, of a yellowiſh colour, and attended with alternate itchings and burnings; the eyes grow more red, and ſeem dull, heavy, and fixed; the countenance changes to a livid colour, and appears bloated and ſcaly, and covered with blotches and fiery pimples; the tonſils of the throat ſwell, become hard, and are affected with a dull throbbing pain; the neck grows hard and ſtiff, and inflammatory tumors of various ſizes are interſperſed among the glands and the muſcles of the upper part of the breaſt and ſhoulder-blades; the mouth begins to grow ſore, and the cheeks within are covered with eruptions of a very inflamed appearance; the tongue ſwells, and is covered with a ſlimy ſlough, or a hard and rough cruſt; the palate and throat alſo ſwell and become ſore, and the roof of the mouth is ſtudded with hard pimples and lumps; the ſize of the noſe is increaſed, the noſtrils appear wider than uſual, and are ſtopped up with a ſcabby ſlough, or emit an acrid and corroſive humour.

In this ſtate of the diſeaſe the head beneath the hair grows cruſty and hard; the hair changes from it's natural colour to grey or white, and falls off by degrees; the wriſts, hands, and fingers, grow ſtiff and ſwelled; the nails extend, become thick, and grow rough and yellow, and at length feſter and fall off; the tumors in the glandular and muſcular parts, as well as thoſe which ariſe from the bones, become pointed and inflamed, and emit a tough glewy matter, which ſpreads over the ſurfaces of theſe excreſcences, and covers them with the ſame kind of bran-like ſcales with which the other parts of the ſkin are affected; the bones ſwell, particularly at the joints, grow brittle at the ſpongy parts, and break with the ſmalleſt violence, and the knots at the joints become inflamed, ſtiff, and ſore; the ulcers about the throat creep gradually by the palate towards the bone or cartilage of the noſe, which they corrode and deſtroy; the voice is oppreſſed with hoarſeneſs, the ſpeech almoſt unintelligible, the breath grows ſhort and difficult, the mouth ſeems to be half cloſed and fixed in that ſituation, the breath intolerably fœtid and offenſive; and, as the body becomes loathſome, and the pains inſufferable, the mind ſuffers it's ſhare of anguiſh, and both ſink together under the accumulated load of diſeaſe and deſpair.

But the miſery is not to end here; beſides all the ſymptoms attending a virulent gonorrhœa, ſuch as ſhankers, phimoſis, paraphimoſis, and the various excreſcences which we have already deſcribed as attendant on that diſeaſe; if the patient ſhould labour under complicated infection, or the pox ſhould have ariſen upon the foundation of a gonorrhœa, the patient will be viſited with buboes, which will become hard, cancerous, or ſchirrous, and having fiſtulous communications with the ulcers among the muſcles, will extend the ulceration to all the neighbouring parts.

Fevers now attend of various kinds, and diſtinguiſhed by different ſymptoms; ſometimes with chills and ſhiverings, at others with intenſe heat and violent thirſt; the pulſe varying with the complaint, being at one time full and heavy, at another low, irregular, and intermitting: ſometimes the patient is afflicted with waſting ſweats, and an irkſome palpitation of the heart; at others he is affected with an univerſal tremor and weakneſs, dimneſs of ſight, giddineſs, and faintings.

As the criſis draws on, a gnawing and racking pain is felt through the whole head, and in each particular part of it; that of the bony parts is ſharp and grinding, and in the fleſhy muſcular, and ſofter parts, burning heat and other aggravated ſymptoms of inflammation take place, accompanied with a ſcalding dyſentery, a difficulty of making water, or a total ſuppreſſion of urine; and painful ſpeech, ſwallowing, and breathing.

In the laſt ſtage, the tumors, knots, and ulcers, of all denominations, crack, ſplit, and burſt open, and the whole body ſeems to be in a ſtate of almoſt confluent ulceration; the ſwellings on the head break, and form wounds flowing with a fœtid and acrid matter; the noſe ulcerates, and the cavities of the noſtrils are filled with venereal excreſcences; the eyes are clogged with matter, and ſometimes appear alſo in an actual ſtate of ulceration; the ears run with a fœtid humour; the ulceration of the mouth corrodes the roof of it, and opens a wide paſſage into the noſe; the throat is ulcerated both within and without; the teeth grow looſe and fall out; the breath becomes equally offenſive to the patient himſelf and thoſe about him; the excreſcences or tumors on the bones ulcerate; and the bones themſelves grow brittle in every part, are affected with rottenneſs, and exfoliate, or ſhell off, emitting a ſharp and acrimonious fluid.

From this period all is horror: the whole frame becomes putrid, loathſome, and corrupt; the very limbs mortify and drop off; till at laſt the poiſon ſeizes the vitals, and finiſhes a life of inſupportable anguiſh, and diſgraceful miſery.

In the female ſex this diſeaſe is attended with other peculiar circumſtances. Women are liable from it to ſuppreſſions, or immoderate diſcharges of the periodical evacuations; to the fluor albus, or whites; to hyſteric fits; to cancers in the breaſt, and to the ſame diſorder, together with other abſceſſes, ulcers, inflammation, ſcirrhus, and mortification of the womb: thoſe who labour under this diſeaſe are in general barren or ſubject to abortion; a happy circumſtance, as the children produced from ſuch habits come into the world deformed with ulcers, affected with rottenneſs, and covered with foul eruptions.

Such are the ſymptoms of a malady imprudently and diſgracefully contracted, and in a ſtate of neglect or miſmanagement: and much does it behove mankind, and young perſons of both ſexes eſpecially, to attend to the alarming catalogue, and conſider before it be too late the dreadful conſequences that await an unlawful indulgence of thoſe paſſions which were inſpired by the Almighty for purpoſes of wiſdom and mercy; and which, directed to proper ends, are equally conducive of health, happineſs, and reputation; but being turned into the channels of vice, produce diſeaſe of body and depravity of mind, and unfit the wretched victim of his luſts for the comforts of ſociety, or the pleaſures of an intercourſe and communication with the world.

But though every one of the ſymptoms we have enumerated may not unite in the ſame perſon, yet they are all attendant on the diſeaſe in it's different ſtages and progreſſions; and unleſs the infection is combated by proper remedies, or death ſtops the courſe of the diſorder, they will all or moſt of them approach in their turns, and render the miſerable ſufferer the ſpectacle we have juſt deſcribed.

For the cure of this diſeaſe, as well as every other ſpecies of venereal infection, mercury, as we have already obſerved, is the only effectual remedy, the adminiſtration of which may be directed in a great variety of forms: till within a very few years the radical cure of this very confirmed ſtate of the diſeaſe hath been ſuppoſed to be confined to a ſalivation; the methods of raiſing and treating which are as follows.

Previous to this operation, it will be neceſſary to prepare the body for a few days by a ſpare diet, and in ſanguine or full habits bleeding will be proper; after theſe precautions the patient ſhould go into a warm bath for two or three ſucceſſive days, keeping himſelf conſtantly in a warm room, and wearing a flannel ſhirt.

When this preparation has been made, let the patient with his own hands rub in, every night before a fire, two drams of the ſtrong mercurial ointment, beginning at the ancles, and rubbing upwards to the knee, then round the joints, and ſucceſſively to the thighs, covering the parts anointed with worſted ſtockings and flannel drawers: after an ounce of the ointment has been thus uſed, it will be adviſeable to wait the effect of it, and ſo to proceed gradually, that the ſalivation may not be produced too ſuddenly; to this end, if the mouth begins to ſwell and be ſore before the whole ounce of ointment has been rubbed in, the quantity may be leſſened to a dram of it in the twenty-four hours.

It ſometimes happens, that more than an ounce of the mercurial ointment will be required to raiſe the ſpitting; but as it is always deſireable to bring on the ſalivation without occaſioning any ſwelling of the head, it will be prudent to attend carefully to the approach of that ſymptom, as the great object in this caſe is to raiſe the ſalivation ſlowly and gradually, and to let it go off in the ſame way.

Except in very ſtrong conſtitutions, from a pint to a quart is a ſufficient diſcharge of ſaliva in twenty-four hours; and this may be continued from two weeks to four or five, according to the habit of body and the ſtate of the diſeaſe; during which time the patient's ſtrength muſt be ſupported with plenty of light and nouriſhing diet, and he ſhould, at the moſt, every three hours, drink a pint of gruel, of the decoction of mallows and liquorice mixed with milk, or of barley-water with gum Arabic diſſolved in it: if the diſcharge weakens him too much, or occaſions fainting, he may now and then take a little white wine whey, or even ſpiced wine or ale, but in ſmall quantities.

After the ſpitting has been lowered by degrees, and carefully, but by no means ſuddenly ſtopped, ſuch gentle purges as the following will be proper.

Take of the infuſion of ſenna, two ounces—of tincture of ſenna, three drams—of the diuretic ſalt, half a dram—of ſyrup of roſes, one dram. Make a draught, to be taken in the morning occaſionally as circumſtances require.

If the ſalivation continues longer than is neceſſary, it may be checked by repeating the ſame mild purging draught.

It ſometimes happens that the mercury does not produce the deſired effect, and no ſymptoms of ſalivation appear, even after a conſiderable quantity has been rubbed in: in theſe caſes ſmart vomits ſhould be given; for which purpoſe four or five grains of the turbith mineral is recommended, which ſhould be worked off with plenty of warm gruel, chicken broth, or whey.

If the mercury ſhould run off by ſtool, and occaſion a diarrhœa, the following bolus is directed.

Take of diaſcordium, one ſcruple—of the compound powder of bole, without opium, half a ſcruple. Make a bolus, to be taken immediately, and repeated as circumſtances may direct, with three or four ſpoonfuls of this julep.

Take of ſimple cinnamon water, three ounces—of ſpirituous cinnamon water, half an ounce—of the japonic tincture, one dram and half. Mix.

And in this caſe the patient is adviſed to uſe the white decoction as his common drink; to make which—

Take of calcined hartſhorn prepared, two ounces—of gum Arabic, two drams—of water, three pints. Boil till it is reduced to a quart; let it ſettle, and ſtrain or pour it off fine.

If the looſeneſs ſhould be attended with violent griping pains, the following clyſter may be adminiſtered.

Take of the white decoction, eight ounces—of opium diſſolved, two grains. Make a clyſter, to be given moderately warm.

After which the patient ſhould take a ſmall quantity of red wine heated with ſpices.

If the ſalivation riſes ſo ſuddenly, as to occaſion danger, bleeding, and purging clyſters are recommended.

A ſalivation may alſo be raiſed by the internal uſe of mercurials; and five grains of calomel, given in a bolus every other night, will in general anſwer this purpoſe.

After a ſalivation, the following decoction is adviſed to be drank, to the quantity of three half pints or a quart a day, for three weeks or a month.

Take of the root of ſarſaparilla bruiſed, four ounces—of ginſeng root bruiſed, half an ounce. Boil them in two quarts of water over a gentle fire, till it is reduced to one quart; when it is cold, ſtrain it for uſe.

When the mouth remains ſore after ſalivation, the following gargle may be uſed.

Take of red wine, half a pint—tincture of myrrh and common honey, of each half an ounce. Stir the whole well together.

Or, take of the mucilage or jelly of quince ſeeds, two ounces—of tincture of roſes, one ounce.

To make the tincture of roſes—

Take of red roſe-buds, the white part being cut clean off, half an ounce—of ſtrong ſpirit or oil of vitriol, one ſcruple—of boiling water, one quart and half a pint—of refined ſugar, one ounce and half. Mix the ſpirit of vitriol with the water in a glaſs or glazed earthen veſſel; ſteep the roſes in the mixture, and when the infuſion is cold filter it and add the ſugar.

But though, in compliance with a practice which is ſtill in a degree continued, and may in ſome inſtances be neceſſary, we have given full directions for raiſing a ſalivation, and for the treatment and management of the patient under that operation; yet this method of cure daily loſes ground, and other modes of adminiſtering mercury are adopted, equally efficacious in the expulſion of the venereal infection, however great it's progreſs, or violent the ſymptoms occaſioned by it; without being productive of the danger which follows the diſcharge by the ſalivary glands, and the inconvenience which always attends this courſe.

Mercury, given as an alterative, will unqueſtionably remove every venereal ſymptom, where any hope of cure remains; and for this purpoſe the common mercurial pill may be taken every day, or every other day, in greater or leſſer quantities, according to the effect it produces, the conſtitution, and the degree of violence with which the diſeaſe prevails: great attention muſt be paid to the operation of the medicine, and if any tokens of approaching ſalivation appear, the uſe of the pills muſt be diſcontinued for a day or two, and a gentle purge or two taken, after which the courſe of pills muſt be reſumed under the ſame precautions.

It is impoſſible to aſcertain the quantity of mercury neceſſary to effect a cure; this muſt depend wholly on circumſtances, and the adminiſtration of it muſt be ſtopped or continued as the venereal ſymptoms appear to yield to the medicine or remain obſtinate.

The following preparation of mercury hath alſo been uſed with the higheſt ſucceſs.

Take of corroſive ſublimate, two grains; diſſolve it in four ounces of French brandy. Take a common table-ſpoonful, to the amount of half an ounce, varying the quantity according to age, conſtitution, and other circumſtances, twice a day; and after each doſe half a pint of the decoction of ſarſaparilla. Britiſh malt ſpirit may be ſubſtituted for brandy.

The corroſive ſublimate may be diſſolved in water, in the proportion of five grains to half an ounce of water; and of this ſolution the patient may take from fifteen to thirty drops night and morning, in a table-ſpoonful of brandy or other ſpirits;

rits; or the proportionable quantity of mercury may be given in the form of pills.

Mercury is alſo preſcribed as an alterative in the following form.

> Take of calcined quickſilver, from half a grain to two grains—of precipitated ſulphur of antimony, five grains—of opium, from half a grain to a grain—of conſerve of hips, enough to make a bolus To be taken every night going to reſt.

With the uſe of this bolus, the following decoction is alſo recommended.

> Take of the root of mezereon, two drams—of the root of ſarſaparilla, three ounces. Boil them over a gentle fire in two quarts of water till half is conſumed, and take half a pint three or four times a day.

With the courſe laſt mentioned, warm bathing is adviſed, and the continuance of the medicine and decoction ten days or a fortnight after the venereal ſymptoms have diſappeared.

The following courſe of medicines has alſo been offered as certainly efficacious in the cure of this diſeaſe in it's moſt aggravated ſtate.

> Take of rectified ſpirit of wine, four ounces—of the Canada balſam half an ounce—of gum guaiacum, half an ounce—of oil of ſaſſafras, one dram—of corroſive ſublimate, ten grains. Diſſolve the mercury in half the ſpirit of wine, and in the other half the Canada balſam and gum guaiacum: when the latter are compleatly diſſolved, ſhake the bottle well; then let it ſubſide, and pour off the clear liquor very carefully; then mix this with the mercurial ſolution, and add to the whole the oil, which will immediately incorporate if it is pure.

Of this tincture the patient is directed to take from ten drops to twenty, according to circumſtances, night and morning, in a glaſs of wine, or wine and water, and to continue it till no venereal ſymptom remains.

To accompany this medicine, the following medicated ale is recommended to be taken as a common drink, both at meals and at other times when the patient is thirſty.

> Take of malt, one pound—of ſaſſafras root ſliced, half a pound—of water, a gallon. Boil the whole together half an hour; let it ſtand till it is cold, then pour the liquor off carefully, and bottle it for uſe.

And this drink is by ſome preferred to the decoction of ſarſaparilla or other woods.

During this courſe, all eruptions, excreſcences, and other external appearances, are to be treated as directed in the virulent gonorrhœa; and when the ſcurf or ſcab about the head and face becomes ſo hard and cruſty, as to be extremely troubleſome and likely to crack, the following liniment is recommended.

> Diſſolve ten grains of corroſive ſublimate in four ounces of water, and add to it one ounce of the ſaponaceous liniment. Shake the whole well together before it is uſed. Dip a ſoft linen rag in the mixture, and apply it frequently to the part.

When the glandular parts are affected with ulcers, the ſame methods are adviſed for the diſperſion; or, if that cannot be effected, the ſuppuration, opening, and healing them, as have already been preſcribed in caſes of buboes.

In caſe of ulcers in the mouth and throat, the following gargle is offered.

> Take beſt vinegar and roſe water, of each four ounces—purified nitre and common alum, of each two drams—of honey, half an ounce—of corroſive ſublimate, five grains. Diſſolve the mercury in the roſe water, and mix all together.

For excreſcences and ulcerations in the noſe, or thoſe parts with which it communicates, a powder has been recommended to be taken occaſionally by way of ſnuff.

Take of the flowers of lavender, one ounce —of the root of Florentine orrice, half an ounce—of calomel prepared with water, two ſcruples. Reduce the flowers and orrice to a fine powder, afterwards powder the calomel ſeparately, and then mix the whole well. A pinch of this, ſnuffed up occaſionally, is ſaid to operate very effectually for the removal of thoſe inconveniencies.

And when the eyes are affected, this water has been adviſed.

Take of water diſtilled in a glaſs alembic, four ounces—of corroſive ſublimate, one grain. Shake the bottle. Let it ſtand twenty-four hours, and pour it off cautiouſly, ſo as not to diſturb the ſediment, and drop a ſingle drop into the eye occaſionally, lowering it with water if it is too corroſive.

Many other preſcriptions might be offered, which are adapted to particular ſymptoms; ſuch as a caries or rottenneſs of the bones, gangrene, mortification, and ulceration of the ſpinal marrow: and directions might be given for various operations which the deſperate ſtate of the patient, in the moſt cruel and aggravating circumſtances of this diſeaſe, may render neceſſary to the preſervation of life; ſuch as the amputation of the penis, the extirpation of a ſcirrhous or mortified teſticle; laying open an impoſthume, abſceſs, or fiſtula, in the perinæum, and the like; but as the caſe muſt be dangerous when either of the firſt mentioned ſymptoms make their appearance, and as no operation can be performed with ſafety without the aſſiſtance of a ſkilful ſurgeon, we apprehend ſuch preſcriptions and directions will be needleſs in this work; indeed, we venture to aſſert with great confidence, that a due attention to the treatment which has been recommended in every venereal caſe, will effectually prevent this diſeaſe from making it's progreſs to the deplorable ſtate in which only they can be uſeful; for we do not entertain a doubt but that an alterative courſe of mercury, in either of the forms before preſcribed, (among which we conceive the ſolution of corroſive ſublimate in brandy or other ſpirit is to be preferred) will infallibly eradicate every particle of venereal infection; and, if taken in time, prevent the worſt and moſt diſagreeable conſequences of this ſubtle poiſon.

But though the good effect of mercury in the removal of theſe diſeaſes admits not of a ſhadow of doubt, yet it is neceſſary to caution our readers againſt expecting it to operate as a charm, or forming ideas that the ſwallowing a certain quantity of this medicine, without precaution or diſcrimination, will anſwer every purpoſe; and that, under the protection of this powerful remedy, they may indulge in accuſtomed freedoms, or riot in extraordinary exceſs; that it may be taken at all times and ſeaſons, and by perſons of all habits and conſtitutions, without particular limitation or diſtinction; and that, however often repeated, it's operation will be equally ſafe and certain.

The fact is, that mercury is at all times to be adminiſtered with ſcrupulous and cautious deliberation, and that there are many caſes in which it cannot be adminiſtered at all without previous preparation; and others, where the quantities muſt be varied according to particular circumſtances, and the uſe of it intermitted, and that, perhaps, ſeveral times, in attempting a ſingle cure.

For inſtance, if a violent, acute diſeaſe of any kind, ſhould have reduced the patient's ſtrength, or it has otherwiſe been exhauſted by natural or accidental cauſes, it would be extremely imprudent to begin a courſe of mercury till the habit has been reſtored by regimen and medicine; or if, in the courſe of curing a venereal malady, the patient ſhould be attacked by a putrid or burning fever, pleuriſy, inflammation of the lungs or inteſtines, or other ſharp and critical diſorder, it would be madneſs not to diſcontinue the mercurial courſe till the new invader of the patient's health has been expelled, by means which however well calculated to anſwer that purpoſe, might prove totally incompatible with the uſe and operation of mercury.

Mercurial medicines ſhould by no means be adminiſtered during the continuance of the female periodical diſcharge, nor in the latter ſtages of pregnancy, if it can poſſibly be avoided: in the latter caſe, if the circumſtances are preſſing, they ſhould be given in ſmaller quantities, and leſs frequently than uſual; but, unleſs there is a probability that the child may alſo receive benefit from them, it is more ſafe and adviſeable to poſtpone their uſe till after delivery.

In the adminiſtration of theſe medicines, children and perſons advanced in years are to be treated alike; the quantities neceſſary to produce a proper effect in ſtrong, robuſt, and vigorous conſtitutions, would occaſion a ſalivation in unſettled, delicate, or debilitated habits, and the effect mercury may have on aged perſons is always uncertain; the ſame doſe will at one time operate with ſurprizing violence, and at another appear to be wholly inactive and inefficacious.

In ſome chronic diſeaſes, mercury may be admitted without the ſmalleſt riſque; in others it ſhould be given with a ſparing hand, and with infinite caution: thoſe who are afflicted with nervous diſeaſes, who are ſubject to exceſſive inteſtinal diſcharges, to violent and often repeated fits of convulſion or epilepſy, or to ſcrophulous or ſcorbutic tumors or eruptions, ſhould refrain from mercurial medicines till theſe diſorders are removed; but the ſame caution is not neceſſary in aſthmatic complaints, ſtone, gravel, rheumatiſm, or dropſy.

Previous to the commencement of a courſe of mercury, ſome preparation is neceſſary; in ſome inſtances bleeding will be proper, which will be directed by the fulneſs of the habit; and the repetition of the operation muſt be governed by the patient's age, ſtrength, and conſtitution: gentle purges ſhould never be omitted, but this evacuation may be required to be more or leſs frequent, according to the particular circumſtances of the caſe. It is alſo requiſite, that the patient ſhould alter his uſual courſe of living, both with reſpect to food and liquors, which ſhould be light and cooling: if he is accuſtomed to uſe violent exerciſe, or ſevere labour, both ſhould be diſcontinued before a courſe of mercury is entered upon; and he who expects to reap the advantages of this medicine, muſt be as attentive to the operations of the mind as of the body. Internal agitations act more forcibly in oppoſing the good effects of alteratives of all kinds, than the moſt active exertions of the body.

And, during the uſe of mercurials, a regimen ſtill more ſtrict will be required; yet this is in general more difficult to be complied with than the moſt exact regularity in taking the medicines: alterations in diet, and additional warmth, both which are indiſpenſibly neceſſary, will naturally occaſion obſervation and ſuſpicion, and as many circumſtances frequently concur to make it deſirable for the patient to conceal the ſituation of his health, he is too apt to flatter himſelf, that he may depend on the efficacy of the medicine alone, and diſregarding the neceſſary accompaniments of living low, and avoiding extremities of cold, expoſure to wet, or other inclemencies, inſtead of being benefitted by it, incurs miſchief, and gets rid of a few of the immediate ſymptoms, at the expence of a dreadful catalogue of future evils, which ſooner or later appear in the ſhape of ulcers in the throat, ſcirrhous teſticles, fiſtulous or cancerous ulcers, aching and too often rotten bones, putrid and offenſive breath, hectics, conſumptions, and, worſe than all the reſt, a perpetuation of diſeaſe in a wretched offspring, on whom the ſins of the father will be probably viſited, even farther than to the third and fourth generation.

Another rock on which the too credulous patient is liable to ſplit, is an earneſtneſs to get rid of the diſeaſe too ſpeedily. Neceſſity frequently, convenience always, makes it deſirable to obtain a cure with the utmoſt expedition; and to this end, he takes his medicines too haſtily, and leaves them off much too early: if men would be convinced, that it is more ſafe to continue the uſe of them a month too long, than to diſcontinue them a day too ſoon, conſequences of a very fatal nature would often be avoided. If the poiſon is not totally expelled, the diſeaſe breaks out afreſh, the ſymptoms are always aggravated, and new ones commonly occur; the patient is obliged to reſume the courſe of medicine, but the ſame impatience prevails, he ſtops ſhort of the cure, and by repeated indiſcretions of the ſame kind, eventually ruins his conſtitution, and entails miſery on himſelf and his poſterity. We would earneſtly recommend to ſuch of our readers as may unfortunately or imprudently incur this diſeaſe, to begin a courſe of mercurial medicines by ſmall doſes, to raiſe them by degrees to the largeſt quantities we have preſcribed in the ſeveral different circumſtances, and when the venereal ſymptoms diſappear, to leſſen the doſes gradually, both as to quantity and frequency, extending, however, the uſe of moderate ones a conſiderable time beyond the appearance of indiſpoſition.

Nor is this the only error into which the unhappy patient is apt to lead himſelf: by a train of argument founded on his own convenience or inclination, but unſupported by the ſmalleſt degree of reaſon, he perſuades himſelf, that the diſeaſe once cured, his health is compleatly reſtored to it's original ſtate; that a freſh infection, in like manner removed, leaves his conſtitution in the ſame plight as at the attack, and that as long as he continues effectually to expel the poiſon, it is of no importance how often he receives it.

This is a fatal miſtake, to which many a good conſtitution hath been fooliſhly and wantonly ſacrificed; in the ſecond attack of the venereal diſeaſe, whether it be a virulent gonorrhœa or confirmed pox, the ſymptoms conſtantly affect the ſame parts as have been the ſeats of the diſorder in the firſt infection, and this happens as often as the diſeaſe occurs; hence it is obvious, that repeated ulcerations, excoriations, tumors, or excreſcences, muſt of conſequence weaken and deſtroy the veſſels, muſcles, or glands, among which they are formed or take place, and as the whole ſyſtem ſuffers from the injuries received in a particular part, it follows of courſe, that the ſecond infection will be more pernicious than the firſt, the third than the ſecond, and ſo on in an increaſing ſcale of deſtructive operation, till the whole frame is involved in the calamity, and the infatuated ſufferer incurs the puniſhment of his own folly and temerity, and diſcovers, too late, that he has trifled with the bleſſings of Heaven, and awaking from his dream of ſecurity, finds the powers of medicine ineffectual to reſtore a weakened and debilitated habit, and re-eſtabliſh a broken conſtitution.

When, from either of the laſt mentioned cauſes, or from neglect or miſmanagement, the venereal taint has ſpread itſelf through the whole body, and corrupted the blood univerſally; and when the habit is ſo reduced by the diſeaſe, as to be unable to ſupport the effects of mercurial medicines, regularly adminiſtered in the manner we have preſcribed, other methods muſt be adopted; decoctions of the woods, and a milk or vegetable diet may be tried, and as ſtrength is reſtored, the mercury muſt be given in ſmall doſes, and at intervals, by which means, the more dreadful effects of the venereal infection may be prevented, till the patient's conſtitution is ſo far improved as to admit of a proper courſe; under this kind of treatment, thoſe who have been reduced to the gates of death, have been reſcued from the grave, and almoſt miraculouſly brought back to health, ſtrength, and vigour; and habits, which have appeared ſhattered and worn down with hectics or conſumptions, have been perfectly reſtored by ſuch ſimple and eaſy rules as we have juſt now offered to our readers.

Before we quit this unpleaſing ſubject, it may not be improper to take a ſhort retroſpect of the doctrines we have advanced, with reſpect to the treatment and cure of the venereal diſeaſe in it's ſeveral ſtates and ſtages, and to throw together in a few words the general plan which we recommend.

The firſt object of attention is cleanlineſs; without the practice of this neceſſary precaution, the beſt preſcriptions will be offered, and the moſt efficacious medicines adminiſtered, in vain. Slight infections are frequently removed by a due regard to this article, in external waſhings and frequent injections; and if this method was purſued whenever any ſuſpicion was entertained of infection being received, it would probably, in many inſtances, prevent the venereal poiſon from taking effect at all. Water, with a ſmall addition of ſpirits or oil, and warm milk and water, are almoſt always at hand, and as the uſe of them is attended with little trouble and no inconvenience, it is aſtoniſhing that men, devoted to their pleaſures, ſhould loſe ſuch fair opportunities of preſerving health on eaſy and reaſonable terms.

When the ſymptoms of infection firſt make their appearance, they are always accompanied by more or leſs of inflammation; to remove or leſſen which, bleeding or gentle purges will be neceſſary; in full and robuſt habits both: the former muſt depend on circumſtances, the latter is indiſpenſible.

When by theſe means the inflammation is removed, the courſe of mercury ſhould commence, and as we adviſe it's being given as an alterative in all poſſible caſes, the patient, or thoſe about him, ſhould ſtrictly obſerve the operation of the medicine; and if, from the ſwelling of the head or great ſoreneſs of the mouth, a ſalivation is apprehended, the doſes ſhould be reduced in quantity, and either given leſs frequently, or wholly intermitted for a time, as the continuance or abatement of the laſt mentioned ſymptoms may direct. If a ſpitting ſhould have actually commenced, great care is neceſſary in ſtopping it, which can only be done with ſafety by diſcontinuing the mercury, giving the patient a ſmart purge or two, and keeping him rather warmer than uſual.

During a courſe of mercury, regimen is of very great importance; the patient ſhould abſtain as much as poſſible from fleſh meats of all kinds; ſpoon meats, milk, and vegetables, are the proper food; ſalted, dried, ſeaſoned, or ſpiced meats, are extremely pernicious: nor is leſs caution required with reſpect to his liquors, ſpirits of all kinds are inadmiſſible, and the leſs wine the patient drinks the better; at any rate, if he indulges in this way, the wine ſhould be diluted, for whatever adds to the inflammation increaſes the difficulty of the cure.

The patient ſhould alſo guard againſt cold, wet, or expoſure to ſharp winds; a cold taken at this time retards the cure exceedingly, and frequently brings on additional, diſagreeable, and obſtinate ſymptoms: flannel drawers, and a waiſtcoat of the ſame materials next the ſkin, ſhould be conſtantly worn by perſons in this ſituation, and particular regard ſhould be paid to the feet, which ought always to be kept dry, and covered with woollen ſtockings.

The air has certainly conſiderable influence in accelerating or delaying the cure of venereal diſeaſes; inſtances have frequently occurred, where patients, and eſpecially in the confirmed pox, have received no benefit from a judicious courſe of mercurials whilſt they have remained in cities or great towns, yet the moment they have been removed to a pure and dry air in the country, the medicines have taken effect, the amendment hath been almoſt immediately perceivable, and the cure hath been perfected without farther difficulty.

In the article of exercise, ſome regulations are neceſſary: walking, or riding on horſeback or in a carriage, occaſion a commotion and friction of the diſeaſed parts, and are therefore prejudicial; the leſs motion, and particularly of a violent nature, the patient uſes, the more ſpeedily he will in all probability get rid of his complaints.

Above all, it behoves thoſe who are viſited by this reward of their faults or follies, to reſiſt the flattering ideas of a cure being compleated in a ſhorter time than reaſon or circumſtances will admit: it is not enough that the ſymptoms abate, or even that they wholly diſappear; both frequently happen before the virulent matter is totally expelled, and the ſmalleſt remaining particle will be ſufficient to light the flame afreſh, when it is no longer reſiſted by the adminiſtration and operation of medicine.

We have, therefore, adviſed a continuance of the mercurials a fortnight, three weeks, or even a month, after all the appearances of venereal infection are vaniſhed; but they need neither be adminiſtered in the ſame quantities or ſo frequently as before, nor ſhould they be left off ſuddenly: prudence will guide the patient's management in this particular, better than any general directions, which cannot be ſuited to all caſes.

In the decline of the diſorder, during the continuance of the mercurial courſe, and even for ſome time after it has ceaſed, the patient may drink freely of infuſions or decoctions of ſome of the anti-venereal ſimples: and for this purpoſe, either of the following may be uſed, and will anſwer the purpoſe of eradicating any lurking remains of the diſorder, and of producing a favourable alteration of the blood and juices.

Take of freſh ſarſaparilla root ſliced and bruiſed, four ounces—of the ſhaving of guaiacum wood, two ounces—of raiſins of the ſun ſliced and bruiſed, four ounces—ſaſſafras and liquorice roots of each one ounce —of water, ſix quarts. Boil the ſarſaparilla, guaiacum, and raiſins, in the water, over a ſlow fire, till one half the liquor is conſumed, adding towards the end of the boiling the ſaſſafras and liquorice. Let it ſtand till it is cold, then pour or ſtrain it off fine.

Or, take of the freſh bark of mezereon, one ounce. Boil it in one gallon and half of water till it is reduced to a gallon, and towards the end of the boiling add an ounce of ſliced liquorice root. Strain or pour off as before.

Having now performed the diſagreeable taſk of treating very copiouſly of diſorders which are in moſt caſes the fruits of folly, intemperance, and vice; and having pointed out the various ſymptoms which mark the different ſtages and ſpecies of theſe complaints, and offered plain, eaſy, and rational method of cure, adapted to moſt caſes that can poſſibly occur; we ſhall conclude the preſent Chapter and Book with ſome few obſervations which neceſſarily ariſe from the conſideration of theſe prevailing and deſtructive diſeaſes.

In the firſt place we earneſtly recommend to our readers of both ſexes, and particularly to thoſe whoſe youth and inexperience may render them moſt liable to the dire evils we deſcribe, an attentive peruſal of the dreadful catalogue of ſymptoms attendant on theſe diſeaſes in their different degrees and appearances. Let them figure to themſelves the loathſome object of this foul contagion, rendered equally uſeleſs and obnoxious to ſociety, and creeping about the world covered with ſores, ulcers, and offenſive eruptions; his eyes ſunk, weakened, and inflamed; his hearing impaired, his teeth looſened, his breath fœtid, his ſtrength exhauſted, and his faculties clouded or confuſed: let them hear him complain of inſufferable pains by day, and unremitting torments by night; let them remark, that his wretched caſe is unlamented and unpitied, that he is avoided by all but thoſe who from intereſt or obligation are compelled to miniſter to his wants, and that even the former companions of his vices deſert him, and leave him a prey to the complicated horrors of his diſeaſe and his own reflections.

Let them compare this dreadful ſpectacle with the health, vigour, and bloom of youth; the erect form, the manly tread, the lively and penetrating eye, the quick apprehenſion, and the univerſal ſprightlineſs and alacrity, of the untainted and uncontaminated youth; and let them aſk themſelves, if the gratifications of ſenſe, or the indulgence of the paſſions, are worth purchaſing at the price of ſuch a contraſt.

Nor let the licentious voluptuary conceive, that the picture we have drawn of the effects of this diſeaſe is in the ſmalleſt degree aggravated; if he doubts the truth of the colouring, let him reſort to the hoſpitals, and other public receptacles of the victims of venereal poiſon, and he will ſoon be ſatisfied that we have not dealt in exaggeration; on the contrary, he will find, that the portrait falls ſhort of the wretchedneſs experienced by many miſerable originals.

If the votary to pleaſure ſhould be tempted to believe that, becauſe we have pointed out plain, eaſy, and certain methods of cure for every appearance and ſtage of this diſorder, he may therefore indulge in the unlawful purſuits of luſt without reſtraint; and that, if he incurs the ſevereſt effects of his vices, he has nothing to do but to lay by for a while, and take a few pills, boluſes, and draughts, and all will be well again; he will find himſelf wonderfully deceived: each repetition of the diſeaſe renders his conſtitution leſs capable of bearing it, and the effect of the medicine leſs certain. Inſtances are not wanting of men who have been ſo habituated to the uſe of mercury, that it has ceaſed to be efficacious, or has at leaſt acted ſo ſlowly, that the diſeaſe has proved fatal before the operation of the medicine has been powerful enough to reſiſt it's progreſs.

Nor can we omit to remark, that the loathſome conſequences of venereal taints ſeem to be the immediate effects of Divine vengeance againſt thoſe who pervert the natural paſſions, and genuine ſources of pleaſure to the purpoſes of gratifying depraved, vitiated, and abandoned appetites; who, rioting in libidinous exceſs, forego the rational enjoyments of life, and purſuing the ſhadowy and unſubſtantial joys of variety, through the foul and muddy channels of vice and intemperance; entail on themſelves immediate diſgrace, conſequential diſeaſe, diſagreeable reflections, and the diſpleaſure of that Being who formed the different ſexes, for the comfort, aſſiſtance, and delight of each other; and who cannot without being offended, behold them communicating miſery and anguiſh, inſtead of mutual love, tenderneſs, friendſhip, and affection.

BOOK VI.

Of Indiſpoſitions and Diſeaſes peculiarly incident to the Female Sex.

CHAP. I.

Of the Conſtitutions of Women.

FROM the different formation of the bodies of males and females, it ſeems evident that the latter were by Nature ordained for thoſe employments which require leſs exertions of activity and reſolution; and that the domeſtic engagements of ſuperintending the œconomy of a family, and providing for wants which ariſe within that ſpere, are expreſsly adapted to the degree of bodily ſtrength and mental fortitude with which the weaker ſex have been endowed by the great Diſpoſer of all things.

Yet we apprehend the ideas of this diſtinction have in ſome inſtances been carried beyond the bounds of reaſon: thoſe of the ſofter ſex, whoſe ſituations in life expoſe them to an increaſed proportion of labour and hardſhip, are in general robuſt, vigorous, and healthful; whilſt thoſe who, from the delicacy annexed to rank and fortune, or from a deſtination to avocations of a ſendentary nature, uſe little exerciſe, and are confined to the houſe for the greater part of their lives, are weak, ſickly, and puny: a degree of exerciſe is required for the preſervation of health in both ſexes, and all conditions; it is only neceſſary that it ſhould be allotted to each in due and fit proportions.

Nor is it to want of education alone that we are to attribute the inequality of talents, which has been ſo much the ſubject of remark in the female ſex: vigour and ſtrength of mind are accompaniments of health and a good conſtitution; hence thoſe who, for want of air and exerciſe, are relaxed and enervated, ſeldom poſſeſs ſtrong or lively underſtandings: the ſame cauſes which produce obſtructions, indigeſtions, windy complaints, and abortions, occaſion fears, apprehenſions, lowneſs of ſpirits, and incapability of directing the mind to ſtudy or ſcience: the whole train of nervous complaints are brought on by a ſendentary and inactive life, and the immediate connection of the nervous ſyſtem with the ſeat of ſenſe, will account for any defect of underſtanding, or want of genius or talents, in thoſe who are ſubject to any of theſe diſorders.

To preſerve in women conſtitutions proportionably robuſt with thoſe of men, the labour or exerciſe ſhould be alſo proportioned; the plough and the thraſhing-floor are too laborious, and perpetual application to the diſtaff or the needle too ſendentary: thoſe ſeem to enjoy the higheſt health, to go through the painful and laborious ſeaſons of pregnancy and child-bearing with leaſt difficulty, and to produce the ſtrongeſt and moſt perfect and healthy children, whoſe ſituation in life places them above continual drudgery, and below the refinements of faſhion and delicacy.

We have diſtinguiſhed the indiſpoſitions to which women are peculiarly liable, from the diſeaſes to which they are alſo more particularly ſubject: the former are not only peculiar, but natural to the ſex, ſuch as their periodical diſcharges, and their breeding, bearing, and bringing forth children; the latter are numerous, but for the moſt part ariſe from one or other of thoſe natural indiſpoſitions; and therefore require treatment and a method of cure, adapted as well to the female conſtitution generally, as to the particular exigency which occurs. In the management of female patients, in all diſeaſes, the ſex will ever be the firſt conſideration with a ſkilful phyſician; and his preſcriptions will always pay due regard to this circumſtance.

CHAP. II.

Of the Menſes, or Periodical Diſcharges.

THE *menſes* are monthly diſcharges of blood from the womb, which in warm climates appear at eight or nine years of age; but in this country from fourteen to twenty, and diſappear at or about fifty. This diſcharge continues to flow with ſome women three, four, or five days, and with others not more than two; the quantity of blood diſcharged alſo differs, being ſmaller at it's firſt appearance, and increaſing in the progreſs to maturity: in warm climates it is ſaid to amount to twenty or twenty-four ounces; in theſe it ſeldom exceeds ten, and frequently not more than four or five. But the quantity depends alſo on the conſtitution and habit of body; thoſe who are relaxed and lean, and who are full of blood, diſcharge more in this evacuation than ſuch as are firm, fat, and of cold and phlegmatic habits: and the like difference will be occaſioned by different modes of living; the luxurious and indolent always loſing more blood than thoſe who live poorly and labour hard. When theſe diſcharges occur early in life, their ceſſation is generally proportionable.

The immediate cauſe of theſe diſcharges is univerſally allowed to be an accumulation of blood, which, burſting the ſides of the veſſels, is diſcharged into the womb, and thence paſſes off; after the diſcharge, the ruptured parts of the veſſels meet and unite again, till they are again over charged by a freſh accumulation; and this happens monthly, becauſe the female conſtitution being fitted for making regularly more chyle and blood than is required for it's own nouriſhment, or as a proviſion for the preſervation of health, a periodical diſcharge of the ſuperfluity becomes neceſſary, till a pregnancy occurs, and then the redundancy of blood which occaſions the menſes is appropriated to the growth and ſupport of the fœtus; which is evident from the appearance of theſe diſcharges when women become fit to bear children, and their ceſſation when they are paſt conception.

The natural paſſage of theſe diſcharges is by the womb; but in ſome inſtances this flux takes other courſes, and is evacuated by periodical vomiting, or ſpitting of blood from the lungs, bleeding from the noſe, or hæmorrhoidal veins, or the like; but when the blood flows by theſe preternatural paſſages, it is either productive of diſorders, or occaſioned by them.

As the approach of the periodical diſcharges is a very important criſis, and the conſtitution at this time undergoes a change, which, according to circumſtances and management, may remove many diſorders which have been afflictive before, or may be productive of others more dangerous and difficult to remove, it is therefore neceſſary that great care and attention ſhould be paid to a matter ſo material to preſent and future health.

Many cauſes may concur to obſtruct theſe neceſſary and critical diſcharges, or to render them irregular and uncertain; among others, a ſedentary employment, or an indolent diſpoſition, are the moſt prevailing; the girl who is deſtined to ſit conſtantly at the needle or the loom, and ſhe who from over indulgence or falſe and miſplaced tenderneſs is confined to the bed-chamber and the drawing-room, fare exactly alike in the effect produced on the conſtitution: from want of motion and air the blood is not duly prepared, nor the redundancy directed to thoſe paſſages where it may be diſcharged; the countenance changes; the patient grows dull, pale, and relaxed; her ſpirits ſink with her ſtrength, and nervous diſeaſes, epilepſies, convulſions, or conſumptions, are the fatal and unavoidable conſequences. As this is the time of life when the conſtitution is in a great meaſure fixed, and the future health depends on proper precautions and due care at this intereſting period, it is incumbent on mothers, and others to whom the conduct and management of female youth is intruſted, to give them proper intimations of the approaching change, and directions to avoid the dangers which may be incurred from ignorance or want of attention.

And as this critical period frequently arrives whilſt girls of a higher claſs are at ſchools, and thoſe in humbler life engaged in apprenticeſhips, ſuch a remiſſion of ſchool buſineſs and labour ſhould now be permitted, as would enable them to enjoy the benefits of exerciſe and air, and accompliſhing the great purpoſe of procuring a regular approach of the periodical diſcharges, to lay the foundation of future health, in the conſtant and uninterrupted returns of them.

It has been uſually conceived, that the approach of the menſes diſpoſes girls to a deſire after green fruit, and all ſorts of traſh; that ſuch a wayward inclination frequently occurs at this time of life is certain, but it is more probably the cauſe than the conſequence of obſtructions; and producing wind, indigeſtion, and want of appetite, prevents that due preparation of the fluids on which the ſecretions depend; and that this is the caſe is the more probable, becauſe theſe unnatural and abſurd propenſities are frequently to be met with among girls of indolent habits, or who are confined to ſedentary lives or employments, but ſeldom happen to thoſe of lively and active diſpoſitions, or whoſe engagements in life expoſe them to labour, or afford them exerciſe.

In the upper circles, one of the principal preſervatives againſt too inactive a life at this critical period is the amuſement of dancing; we would therefore recommend all parents, who wiſh their daughters to provide againſt the dangers of obſtructed diſcharges, and the train of conſequent evils, to indulge them in this healthful and elegant exerciſe: the chearfulneſs of public aſſemblies, and the ſprightly diſpoſitions which draw young people together on theſe feſtive occaſions, give a ſpring to the ſpirits, and diſpel vapours, hyſterics, and that gloomineſs of temper, which frequently proves as detrimental to health as either of thoſe diſorders.

We have obſerved in another part of this work, that the cuſtom of ſqueezing young girls into tight ſtays is deſtructive to health, and the occaſion of a variety of diſorders; but it is in no caſe more pernicious than in that of which we now treat: a fine ſhape cannot be obtained by force without injury to the conſtitution; bracing up the body impedes the circulation, obſtructs the ſecretions, and neceſſarily prevents thoſe diſcharges which can only be regular when Nature is at liberty to perform all her functions without difficulty or reſtraint.

Nor do we approve of promoting theſe

diſcharges by forcing medicines, or of applying inſtantly to phyſic, when the approach of them appears to be delayed; in all ſuch caſes we recommend change of air, exerciſe, a light and wholeſome diet, with variety of active amuſements, as infinitely more efficacious than the beſt medical preſcriptions in the removal of obſtructions to theſe neceſſary evacuations: if a journey can be undertaken with convenience it ſcarce ever fails of ſucceſs.

The ſymptoms which precede theſe evacuations, are a ſenſe of weight, a heat and dull pains about the loins; pains in the head, back, and limbs; ſwelling of the breaſt, and blackneſs about the eyes, occaſioned by the veſſels being fuller of blood than uſual; and theſe ſigns are accompanied with a certain degree of fever, and with a loſs of appetite, and a change of countenance: when a due quantity of blood is excreted, nature is reduced ſomewhat below the ſtandard of health, and the diſcharge leaves a certain degree of languor and diſpiritedneſs.

On the immediate approach of theſe diſcharges proper care ſhould be taken in regulating the diet, that the ſtomach may not be offended by food of a ſour or indigeſtive quality, or by cold, unconcocted, or watery liquors; whatever diſagrees with the ſtomach at other times will be more particularly obnoxious now, and ſhould therefore be ſcrupulouſly avoided: great care ſhould be taken to guard againſt colds, which are more eaſily caught in this ſituation than at any other time; and the diſcharge may, if neceſſary, be encouraged by ſitting over warm water, and drinking warm diluting liquors.

The paſſions of the mind operate ſo ſtrongly in obſtructing the periodical evacuations, that we have known frequent inſtances of their being ſuddenly and totally ſtopped, from the effects of fright, anger, grief, and other violent impulſes of the paſſions; the mind ſhould therefore be kept as calm and undiſturbed as poſſible during the continuance of this diſcharge.

By an attention to theſe rules the menſes may in general be brought on with eaſe, and continued with regularity; if in particular caſes theſe regulations fail, medicines adapted to the particular circumſtances muſt be adminiſtered.

Obſtructions of the menſes are uſually attended with a fulneſs of the veſſels; laſſitude, and diſinclination to exerciſe; univerſal heavineſs; paleneſs of countenance, pains in the back, loins, and limbs; diſcharges of blood from the noſe; pains in the head, with an oppreſſive ſenſe of weight over the eyes; a diſlike of food, a low and quick pulſe, the fluor albus or whites, hectic heats, fluſhes, coughs, hyſteric and fainting fits, tenſion or ſtraitneſs of the womb, and diſtended veins.

If the obſtruction ariſes from a defect of fluids, the following medicines will be adviſeable.

Take tinctura ſacra, (the ſacred tincture) and oil of almonds, each ſix drams—of pennyroyal water, one ounce—of tincture of black hellebore, twenty drops. Make a draught, to be repeated thrice, or taken occaſionally.

Or, take of Rufus's pills, one ſcruple—of ſalt of ſteel, three grains. Make a pill, to be taken at going to reſt, and repeated as occaſion may require.

In full habits the laſt mentioned medicine ſhould be omitted; but bathing the feet in warm water will in all caſes be uſeful.

When the humours have been cold and ſluggiſh, the following medicine hath been uſed with ſucceſs.

Take the aromatic ſpecies, and the martial flowers, of each half a ſcruple. Make a powder, to be taken at bed-time in a ſpoonful of ſimple ſyrup.

Or the following have been recommended in different caſes.

Take of Rufus's pill, one ſcruple—the fœtid pill, and gummous pill, of each half a dram—of calomel, ten grains. Make twenty pills, and give one at bed-time, repeating it occaſionally.

Or, take compound powder of myrrh, one ſcruple—of caſtor powdered, four grains—of ſimple ſyrup, enough to make a bolus. To be taken every ſixth hour, with the following draught.

Take of ſimple pennyroyal water, one ounce—of tincture of black hellebore, thirty drops—of ſyrup of ſaffron, one dram. Make a draught.

If the cauſe of obſtruction is a defect in the quantity of good blood, and in caſes of indigeſtion, or where there is a defect of vital heat, vomits of emetic tartar will be uſeful, and moderate doſes of Rufus's pill, or the ſacred tincture, with the addition of calomel in ſmall quantities, may alſo be given.

Or the following.

Take of conſerve of ſea wormwood, one ounce—of prepared ruſt of iron, ſix drams—of Æthiop's mineral, half an ounce—of *canella alba* powdered, two drams—of caſtor powdered, one dram—of ſyrup of oranges, as much as will make the whole into an electuary; of which the quantity of a nutmeg is to be taken three times a day, with two table-ſpoonfuls of the following medicated wine.

Take filings of iron, Peruvian bark, and *canella alba*, of each two ounces—of rhubarb, ſliced and bruiſed, half an ounce. Infuſe the whole ſix days in three pints of old hock, and then ſtrain or pour it off for uſe.

Or, take of tincture of iron in ſpirit of ſalt, twenty drops—of the decoction of Peruvian bark, two ounces—nutmeg water, and ſyrup of oranges, of each one dram. Make a draught, to be taken twice a day.

Or, take of ſalt of ſteel, or common green vitriol, burnt till it turns white, and reduced to a fine powder, half an ounce—chryſtals of tartar, ſenna, jalap, and ginger, all powdered, of each half an ounce—of oil of cloves, ſix drops—of ſyrup of orange rinds, as much as will make the whole into a ſoft electuary; of which the ſize of a nutmeg may be taken twice a day, drinking after it a tea-cupful of ſage tea, or of warm wine with ginger.

Where the habit is particularly full or bloated—

Take of the deobſtruent pill, one dram—of the gummous pill, half a dram. Make eighteen pills, of which three may be taken night and morning, with three or four table-ſpoonfuls of the following julep.

Take of compound juniper water, one ounce and half—of ſimple pennyroyal water, four ounces—of ſyrup of ſaffron, two drams. Mix together.

Or, take of compound powder of myrrh, one ſcruple—of the martial flowers, ſix grains—of the extract of ſavine, four grains—of ſyrup of ſaffron, as much as will make a bolus. To be taken three times a day.

If the uſe of iron ſhould affect the patient's breath, the following form of adminiſtering it is recommended.

Take of filings of iron, ſix drams—gum ammoniac, and Venetian ſoap, of each two drams—of the aromatic ſpecies, one dram—of aloes, half a dram. Make the whole with ſimple ſyrup into pills of a moderate ſize, and take three once or twice a day, according to circumſtances.

Muſtard-ſeed, to the quantity of half a table-ſpoonful, ſwallowed twice a day, has ſometimes ſucceeded in promoting the menſes, when other means have failed; and placing the feet in warm water, and at the ſame time applying ligatures or tight bandages about the thigh, has in ſome inſtances produced the ſame effect; electricity has alſo been tried with ſucceſs.

When obſtructions proceed from a viſcid ſtate of the blood; in full and groſs habits bleeding may be neceſſary; and after the feet have been bathed in warm water, a cooling purge may be given, and repeated occaſionally: in theſe caſes a cooling and low diet is proper, and the patient's drink ſhould be whey, toaſt and water, or ſmall beer; ſhe ſhould take as much exerciſe as poſſible, and twice a day twenty drops of the tincture of black hellebore may be given in a tea-cupful of warm ſimple pennyroyal water.

When obſtructions of this ſort proceed from other diſorders, they can only be removed by taking proper meaſures to remedy the particular indiſpoſition of body, under which the patient labours, and to reſtore her health and ſtrength; till this is done, forcing medicines will not only be uſeleſs but dangerous.

When the menſes continue too long, or return too frequently, and the diſcharge is ſo great as to reduce the patient's ſtrength during the intervals, it is ſaid to be *immoderate*.

Women, whoſe habits are tender and relaxed, ſuch as indulge in eating and drinking, or uſe improper, hard, indigeſtive, or highly ſeaſoned food, and ſuch as have frequently miſcarried, are liable to ſuffer in this way; nor are more robuſt and vigorous conſtitutions exempt from this complaint, which may be brought on by hard labour, exceſſive exerciſe, or violent paſſions of the mind.

The chief cauſes are, a weakneſs of the veſſels through which theſe diſcharges are made, and an acrimony and thinneſs of the blood; to which may be added thoſe which we have mentioned above, and violently operating or improper medicines.

The approach of this hæmorrhage is uſually denoted by a laſſitude of the whole body, pains in the back and loins, a ſtretching or tightneſs of the ſtomach and ſides, paleneſs of countenance, and a conſtriction of the pores occaſioned by a dryneſs and ſtiffneſs of the ſkin.

If the pulſe is good, bleeding is adviſeable, and the earlier this operation is performed the more advantageous it will prove; but if the ſtrength is greatly reduced, this evacuation muſt be omitted.

The firſt attention muſt be to keep the patient's body ſtill, and her mind undiſturbed; ſhe ſhould be laid with her head low in the bed, and be confined to cooling but nouriſhing diet, ſuch as chicken or veal broth, panada, or ſago with red wine; and her drink may be a decoction of the roots of nettles, or the greater comfrey.

If this treatment is not ſufficient to check the diſcharge, (for it ſhould by no means be ſtopped too ſuddenly) the following medicines may be adminiſtered.

Take of tincture of roſes, two ounces—of nitre, fifteen grains—of liquid laudanum, ten drops. Make a draught, to be taken every ſix hours.

Or, take of alum whey, two ounces—of ſpirituous cinnamon water, two drams—of liquid laudanum, three drops—of ſimple ſyrup, one dram. Make a draught, to be taken every fourth hour, or as occaſion may require.

Or, take of the decoction of Peruvian bark, one ounce and half—of the tincture of Peruvian bark, one dram—of liquid laudanum, two drops—of balſamic ſyrup, one ounce. Make a draught, to be taken as before.

A ſtrengthening plaſter hath been recommended to be applied to the ſpine of the back, and aſtringent fomentations are alſo preſcribed; for this purpoſe uſe the decoction of the bark, with the addition of a ſmall portion of brandy, or of red wine and vinegar.

The following preſcriptions are alſo ſaid to be efficacious.

Take two parts of alum, and one of Japan earth; powder them, and take a ſcruple of the mixture three times a day in a table-ſpoonful of any ſimple water.

Or, take the freſh rind of ſeven oranges; boil them in three pints of water till it is reduced to two. Strain it off, and add one ounce of white ſugar, and forty drops of acid elixir of vitriol, and take five or ſix table-ſpoonfuls every three hours.

Or, take of the Peruvian bark in powder, half a dram—of the acid elixir of vitriol, ten drops. Mix in a glaſs of Port wine, and repeat it three or four times a day.

Two table-ſpoonfuls of the tincture of roſes, with from five to ten drops of liquid laudanum, repeated three or four times a day, may produce very favourable effects.

The following bolus is alſo ſaid to have been ſucceſsful in violent floodings.

Take of alum, half a ſcruple—dragon's blood, and colcothar of vitriol, of each ſix grains—the aromatic ſpecies, and rhubarb in powder, of each four grains—of ſimple ſyrup, as much as will make a bolus; to be taken three times a day, with a ſmall tea-cupful of the tincture of roſes.

When the diſcharge is ſtopped, gentle exerciſe, a light nouriſhing diet, with a glaſs or two of good Port wine, and the uſe of mineral waters, may prevent a relapſe.

When an immoderate diſcharge of the menſes during pregnancy, or violent floodings after miſcarriage, are accompanied or preceded by acute pains, apparently ſpaſmodic, in the lower part of the back or belly, returning with additional violence after every diſcharge, opiates ſhould be adminiſtered in clyſters, which may be compoſed of a decoction of dried roſes, with a dram of liquid laudanum.

The *ceſſation* of the menſes, or periodical diſcharges, hath uſually been conſidered as a criſis of conſiderable danger; females have been taught to look forward to it with anxiety, and to apprehend that the future health and comfort of their lives depend on this period.

But thoſe miſtaken notions, which have not only imbittered the hours of many ſenſible and ingenious women, but have actually poſſeſſed the minds of ſome otherwiſe able and judicious phyſicians, ſeem now to be generally exploded; theſe groundleſs apprehenſions are in a great meaſure removed, and a reaſonable confidence ſubſtituted, that with very little aſſiſtance Nature is capable of providing for her own ſecurity in this circumſtance.

Theſe erroneous opinions were probably founded on a generally received idea, that the periodical diſcharge was an evacuation of peccant matter and morbid humours, ſo malignant and acrimonious, that the retention of it was always injurious, and ſometimes dangerous, to the conſtitution; but this idea no longer prevails, and it is now generally, and ought to be univerſally known, that this diſcharge poſſeſſes no ſuch pernicious properties, but is merely a redundancy of that pure and vital blood which animates the whole frame of a healthy woman; that it was created for obvious purpoſes, in which diſeaſed and corrupted matter could not be employed; that it continues whilſt theſe purpoſes can be fulfilled by it, and ceaſes when, according to the conſtitution of the human frame, it is no longer neceſſary; and that the retention of it is in general attended with no effects which are not as eaſily removed as any other diſorders to which they may be liable.

The powers of Nature ſpontaneouſly bring about the ceſſation of this evacuation; the proviſion for it ceaſes when it is no longer to be of uſe; the extraordinary quantity of blood is not generated, the veſſels provided for it's diſcharge cloſe, and for the moſt part this proceſs commences and is carried on without the leaſt interruption in the health of the ſubject in whom this change happens, which generally takes place about the age of forty-five, or from thence to fifty, earlier or later according to conſtitution and other circumſtances, and the ceſſation of this diſcharge is ſometimes ſudden, but more frequently gradual, decreaſing almoſt imperceptibly for months.

In ſome women, as we have already obſerved, the ceſſation of the periodical evacuation makes no material alteration; others, who have been accuſtomed to ſuffer indiſpoſition during the times they were ſubject to theſe diſcharges, recover, after they have entirely ceaſed, ſuch a degree of health and vigour, as they have not experienced during the continuance of them; but there are others who ſuffer ſuch inconvenience from this alteration, as renders ſome aſſiſtance neceſſary.

About the time when this change takes place, many women find the diſorders to which they have before been ſubject more urgent, frequent, and troubleſome; ſome feel the well known ſymptoms of fulneſs of blood, ſuch as fluſhes, heat, reſtleſſneſs, want of ſleep, or troubleſome dreams, and unequal ſpirits; others are attacked with colic pains, and inflammations in the bowels and other parts; ſpaſms, ſtiffneſs of the limbs, ſwelled ancles with pain and inflammation, and the piles and other uſual effects of redundancy of blood: in theſe caſes it appears that the organs which were inſtituted for the purpoſe of providing the natural ſurplus, continue to perform their offices, while the ſize of the veſſels deſtined for it's diſcharge is diminiſhed, or they are entirely cloſed.

But in oppoſition to theſe caſes, there may be others in which the organs formed to provide a ſurplus, are only capable of keeping up the neceſſary ſtock, which often happens in infeebled habits; and on the diſparity in the operations of theſe two different organs, moſt of the complaints incident to the ſex at this particular period depend: in ſome the excretory or diſcharging veſſels become unfit for theſe purpoſes, whilſt the organs of accumulation continue to act with effect; in others the proviſion ceaſes before any alteration is produced in the excretory veſſels.

For the relief of thoſe who are of full plethoric habits, and who have been accuſtomed to large evacuations, frequent bleedings in ſmall quantities at a time, gentle laxatives, and great moderation in diet, are to be recommended; and they ſhould be particularly attentive to theſe articles, at the times when the diſcharge ſhould come on, according to the periodical return, when the patient is uſually troubled with alternate fluſhes and ſweats, ſucceeding each other almoſt inſtantaneouſly, and recurring many times in a day; ſhe may alſo probably feel herſelf particularly indiſpoſed after eating, in large aſſemblies, or other over-heated rooms, and her ſleep may be reſtleſs, and interrupted with frightful dreams; and theſe ſymptoms generally vaniſh after they have remained as long as the diſcharge uſed to continue, returning again as the accuſtomed period of them recurs; and this courſe, after continuing ſometimes a year or two, or even more, is apt, without proper aſſiſtance, to terminate in immediate and dangerous fluxes, or in apoplexies, palſies, and ſuch other diſeaſes as are occaſioned by an extraordinary fulneſs of the veſſels.

The loſs of four, five, or ſix ounces of blood, at the diſtance of two, three, or four months, according to circumſtances, and as the violence of the ſymptoms may require, will in general prevent every diſagreeable conſequence; and as the occaſion for bleeding decreaſes with every performance of the operation, ſo the repetitions may by degrees be protracted to longer intervals, till it becomes no farther neceſſary.

Nor ſhould this precaution be omitted on account of the patient's being ſubject to nervous complaints, or objecting to it from fear, or apprehenſion of ill effects: when the pulſe is full and hard, and great heat occurs, with the ſymptoms which we have deſcribed, no danger will ariſe of increaſing even nervous complaints by bleeding; on the contrary they proceed ſo evidently in this caſe from fulneſs, that they ſeldom fail to yield to moderate and repeated evacuations.

As ſwelled ancles are not unuſual in theſe caſes, bleeding is generally thought dangerous, from an idea that it would, at this time of life, inevitably bring on a dropſy: but if the parts appear to be hard, inflamed, and painful, which is moſt commonly the caſe, loſs of blood in a moderate quantity, and gentle laxatives, will hardly fail to remove, inſtead of aggravating the diſeaſe; and the ſame remedies may be uſed with ſafety as often as this complaint recurs.

But an immoderate flux of the menſes is a circumſtance which alſo happens very frequently at this period, and which is in ſome inſtances owing to neglect of evacuations at proper times, in ſome to the uſe of improper medicines, and in others to the peculiar conſtitution of the patient; this appearance happens, for the moſt part, to women of ſanguine habits, who live well, and who are accuſtomed to copious evacuations, or to the common effects of a fulneſs of the veſſels, and calls for the utmoſt care, both with reſpect to preſent reſtraint and future regulation.

If the evacuations are not conſiderable in ſuch conſtitutions, health is often interrupted, either by frequent inflammations of the tonſils or other glandular parts, or by rheumatiſm, eryſipelas, or the piles; and if they ceaſe ſuddenly, either the ſame complaints are aggravated, or the patient is expoſed to repeated and exceſſive floodings; when the latter happens, it is much more prudent to attempt reſtraining the flux by reſt, a very ſparing and not over liquid diet, laxatives, anodynes, and cooling medicines, than by copious and repeated bleedings, or aſtringents of any kind.

Females of very irritable conſtitutions, who are not remarkably full, are yet ſometimes ſubject to ſuch immoderate diſcharges at this period; if, in ſuch habits, the menſes ſtop ſuddenly, the flow and force of the blood on the uterine ſyſtem ſometimes produce a violent flooding, which not only occaſions preſent weakneſs, but increaſing the irritability of thoſe parts in particular, ſubjects the patient to very frequent and debilitating relapſes.

When ſuch caſes occur, bleeding is by no means adviſeable, as it would unqueſtionably add to the complaint; the cauſe muſt be removed, and the patient enabled to ſupport the loſs of blood, by reſt of body and tranquillity of mind, by anodynes and ſuch other medicines as allay irritation, and by a moderately cordial and light nutritive diet, with a reaſonable quantity of ſound generous wine.

The bark having been found ſafe and uſeful, where a regular intermitting fever has been attended with an immoderate flux of this kind, many perſons have been induced to adminiſter the ſame medicine in caſes where theſe immoderate fluxes proceed from ſome irritating cauſe in the womb, or in the neighbouring parts, among which none is more common than that acrimony which produces or precedes a cancer in theſe parts, and which fluxes are attended with pains and heat, darting acroſs the lower parts of the back and belly from hip to hip, and downward to the middle of the thighs; large clots of blood are frequently diſcharged with exquiſite pain, and at the ſame time the flux is increaſed by the force of paſſing them.

In theſe caſes good effects muſt not be expected from the bark; and it has been apprehended, that beginning ſcirrhous and other obſtructions have been much aggrated by the injudicious adminiſtration of it, to reſtrain a diſcharge depending on cauſes not in the power of this valuable medicine to conquer.

Iſſues and ſetons are commonly recommended at this period, as capable of averting

ing all the evils which may proceed from the ceſſation of the menſes; and where the patient has, in early life, been ſubject to cutaneous eruptions, ſore and inflamed eyes, ſwellings in the glands, or other obvious marks of morbid or vitiated humours in the conſtitution, and all which may have diſappeared about the time the periodical diſcharges firſt became regular; or where any preſent foulneſs on the ſkin, flying pains of the cancerous or rheumatic kind, and hardneſs in the breaſt or other parts are evident; ſuch drains may probably be of very conſiderable ſervice: but when none of theſe circumſtances attend, it ſeems abſurd to conſtitute a great and laſting inconvenience for the purpoſe of curing diſeaſes which do not exiſt.

In full and plethoric habits, a ſtrict attention is neceſſary to diet; much animal food, and in particular fleſh ſuppers, are to be avoided by thoſe who are ſubject to immoderate diſcharges at the ceſſation of the periodical evacuations: a total abſtinence from fleſh for a few weeks at this time, would be of ſingular ſervice, and not only ſtop theſe fluxes, and prevent the return of them, but likewiſe avert the numerous diſorders which may be occaſioned by plenitude of habit; ſuch as apoplexies, palſies, fevers, and inflammation; nor is leſs regard due to the liquors, which ſhould be cooling and diluting, and taken in ſmall draughts.

In the interval of the uſual periodical returns, moderate exerciſe is abſolutely neceſſary; but as the times approach when theſe appearances might have been expected, the patient ſhould avoid all violent motion, nor ſhould ſhe frequent public aſſemblies or other heated rooms.

It may be proper to mention a circumſtance or two, which, as they occur ſometimes, though not frequently, ſhould be provided againſt.

Women who enjoy good health are ſometimes ſeized with total ſuppreſſions of the menſes at times of life when ſuch events are wholly unexpected, in ſome inſtances even whilſt they are as young as thirty; and this ſtoppage may be occaſioned by fever, ſudden and violent colds, fright, anxiety, or grief, acting ſtrongly during the flow of theſe diſcharges.

And notwithſtanding this ſuppreſſion, the patient may perceive little or no alteration in her health for a year or two, but may probably grow fat, and ſeem diſpoſed to corpulency; by degrees, however, ſhe finds unuſual complaints, is more liable than common to colds, inflammations of the throat and tonſils, to eruptions of the eryſipelatous kind, and to rheumatiſm; the bowels are, however, much more commonly affected with inflammation and bilious or ſpaſmodic colic, one or other of which return, and often with violence, once in ſix weeks or two months, and ſometimes at longer intervals, but in general at irregular periods; and, if the patient ſurvives the more violent attacks, her conſtitution continues to be harraſſed in this manner, till the time when the menſes ought to have ceaſed in the ordinary courſe.

To avoid the evil conſequences of ſuch a ſuppreſſion, artificial evacuations ſhould be ſubſtituted, inſtead of the natural one which is ſuppreſſed; and this ſhould be done, if poſſible, before the appearance of the diſorders to which the ſuppreſſion may give riſe: bleeding two or three times a year will be proper, with moderate purgatives frequently repeated, and a mild and rather abſtemious diet. The ſeaſon for preventing the difficulties occaſioned by ſuch a preternatural ſuppreſſion, is at the firſt ſenſations of ſickneſs, heat, reſtleſſneſs, or pains beginning to affect the ſtomach, bowels, or other inteſtines, or of any of the ſymptoms which uſually precede the diſorders laſt mentioned.

Another circumſtance frequently happens to women apparently healthy, but who are of ſanguine habits, and diſpoſed to corpulency, uſing little exerciſe, and eating and drinking plentifully: they perceive a ſudden ſuppreſſion of the menſes, long before the expected time of their ceſſation, and ſoon after they grow full, the body ſeems to ſwell and ſtretch, and theſe ſymptoms are accompanied with pain and enlargement of the breaſts, ſickneſs in the mornings, diſlike to, or inclination for, particular foods, and many other ſigns, ſo ſimilar to thoſe of pregnancy, as frequently to deceive married women, and not only induce them to believe themſelves in this ſituation, but to fancy they actually diſcover the motions of the child.

The like circumſtance alſo ſometimes happens to ſingle women about the age of forty, or as the time draws on when the periodical evacuations may be expected to ceaſe; in theſe caſes alſo the belly grows large, the patient becomes unwieldy, the legs ſwell, and a variety of other complaints ſeem to indicate an approaching dropſy. On all theſe ſubjects the piles is a common attendant.

Though it may not be poſſible to aſcertain with preciſion the cauſes from whence theſe preternatural appearances are derived, it is not however difficult to diſcover the proper treatment on ſuch occaſions: repeated bleedings, in ſmall quantities, always afford relief; ſulphur, magneſia, or other gentle laxatives, given conſtantly, prevent the piles, and keep the body moderately open; and regular exerciſe on horſeback, or in a carriage, is always neceſſary to compleat the cure, which, however ſlow and tedious, is generally effected by theſe means, joined with quiet of mind, and a light and drying diet.

CHAP. III.

Of the Fluor Albus, or Whites.

THIS diſeaſe is a flux of thin matter from the *vagina*, or paſſage from the womb; it is ſometimes of a pale greeniſh or yellow colour, but more commonly whitiſh; it is generally clear, but ſometimes foul and fœtid, and frequently ſharp and corroſive.

Women who abound with fluids, and whoſe fibres are relaxed, girls at the approach of the menſes, and women juſt arrived at full maturity, are moſt liable to this complaint, though it ſometimes affects females from childhood to old age. It has been remarked, that women who are ſubject to a mucous defluxion at the noſe, are, upon an obſtruction or ſuppreſſion of the menſes, peculiarly liable to this diſorder.

It may be occaſioned by a cold moiſt air, a ſedentary life, poor diet, or weak, warm, and watery liquors, taken in large quantities; it may alſo follow exceſſive periodical diſcharges, miſcarriages, or miſmanagement in childbirth.

The ſymptoms are various; the patient's face appears ſwelled and white, the parts below the eyes ſwell, and the eyes themſelves are diſordered, and appear as if ſhe was dropſical; the colour of the ſkin is whitiſh, and the lower part of the belly hard; tumors appear in the legs, ſo ſoft as to retain the impreſſion of the fingers; the patient is troubled with a biting pain in her ſtomach, and ſeems to feel an acid water in it when her ſtomach is empty, or ſhe happens to vomit; her breath is affected when ſhe walks up a hill, her legs are cold, her knees feeble, and her womb is unuſually opened, and falls down to it's mouth with a ſenſe of weight; with ſome the diſcharge is daily, but in other caſes it appears for two or three days, and then intermits for a week or longer.

In the more aggravated ſtate of this diſeaſe, the ſymptoms are pain and ſenſe of weight in the loins, foul urine, longings after ſome particular ſorts of food, and loathings of others; indigeſtion, ſwelling of the face in the night, and of the feet and ancles by day; palpitation of the heart and faintings; and the termination of it is ſometimes fatal in a dropſy or conſumption.

When this diſorder is moderate, it may be endured a conſiderable time without producing much inconvenience, but as it encreaſes, it ſpoils the beauty of the face, weakens the digeſtive powers, and produces a general bad habit: it occaſions barrenneſs in ſome women, and in others a diſpoſition to miſcarry; and if this flux is imprudently checked, the belly ſwells, and a hectic fever, with a train of other diſagreeable ſymptoms, follow.

To remove this diſeaſe the patient ſhould uſe moderate exerciſe, but not to fatigue; her food ſhould be nouriſhing and ſolid, but light and eaſily digeſted; her drink ſhould be Pyrmont or Briſtol water, and in ſome caſes weak lime-water; but they ſhould all be mixed with Port wine or claret: rich chicken broths and jellies are uſeful, and a milk diet will ſometimes effect a cure; iſinglaſs, diſſolved in the milk, is peculiarly ſerviceable.

After an emetic of ipecacuanha, or of the antimonial wine, ſtrengthening and aromatic medicines may be adminiſtered, according to the following preſcriptions.

Take of the pureſt frankincenſe, one ſcruple—of the rind of Seville orange powdered, four grains—of balſamic ſyrup, enough to make a bolus. To be taken at going to reſt, and in the morning, with the following draught.

Take of balſam of capivi diſſolved with the mucilage of gum Arabic, half a dram—of barley-water, one ounce—of ſpirituous cinnamon water, three drams—of white ſugar, one dram.

Or, take of compound powder of amber, two drams—rhubarb in powder, and frankincenſe, of each two ſcruples—balſamic ſyrup, enough to make the whole into forty pills; four of which may be taken at bed time, with four ſpoonfuls of the following julep.

Take of the chalk julep, ſix ounces—of troches of ſulphur, one dram and half—of the ſtomach tincture, one ounce and half. Mix.

After theſe medicines, mercurials may be uſed as alteratives; and for this purpoſe the following form is recommended.

Take of quickſilver, one ounce—of Venice turpentine to fix the quickſilver, one dram—rhubarb and cochineal, of each two drams—of elixir proprietatis, a ſufficient quantity to bring the whole to a proper conſiſtence for pills. Make them of a reaſonable ſize, and begin with one night and morning, increaſing the number to ſuch doſes as the patient can take, without producing the ſmalleſt alteration in her ſenſible diſcharges.

When theſe pills have been taken ſome time, chalybeats will be proper, and laſt of all the bark.

Take of the ſimple bitter infuſion, ten drams—of the aromatic tincture, one dram and half—of chalybeat wine, one dram. Make a draught, to be taken every day about noon.

Or, take of the aromatic ſpecies, ſix grains—of ſalt of ſteel, from one grain to two—of mithridate, half a ſcruple—of ſimple ſyrup, enough to make a bolus. To be taken night and morning.

Or, take of the extract of Peruvian bark, one ſcruple—of prepared ſteel, ſix grains—of the aromatic ſpecies, four grains—of ſyrup of ſaffron, as much as will make a bolus.

To be taken twice a day, in the forenoon and afternoon, at proper diſtances from the meals, drinking after each a glaſs of Spa, Pyrmont, or Briſtol water.

But perhaps the moſt efficacious method of adminiſtering the bark is in ſubſtance; and the quantity of two ſcruples, taken twice a day in a glaſs of Port wine or claret, will be found of ſingular uſe.

In the warm ſeaſons of the year, the cold bath is adviſeable; if the weather is too cold to admit the uſe of it, a bath of warm water with aromatic herbs may be ſerviceable.

If any injections are uſed, thoſe of warm water, with a ſmall quantity of vinegar, are the moſt proper.

CHAP. IV.

Of Barrenneſs.

AS the ſterility which prevents conception, ariſes much oftener from acquired than natural cauſes, proceeding commonly from ill-health, it may be properly claſſed among the diſeaſes of women.

But the ill health which prevents procreation, is generally owing to irregularity, exceſs, or luxury; though barrenneſs ſometimes proceeds from relaxation, from obſtructions of the periodical diſcharges, or exceſſive evacuations in that way, and from grief, anxiety, deſpondency, or other paſſions of the mind, and is very frequently occaſioned merely by indolence.

That high living, unſeaſonable hours, and indolence, are great enemies to the propagation of the ſpecies, will appear from a very ſlight enquiry into the families of a given number of rich and poor, taken indiſcriminately: the former are frequently without children, or with one, two, or three, at the moſt; but enter the cottage of the latter, and you will in almoſt every inſtance be ſurrounded with a numerous, healthy, and hardy progeny; nay, this obſervation extends even to whole countries, whoſe females are more or leſs prolific, in proportion to the plainneſs of the food, and the labour required in procuring it.

In that ſtate of relaxation to which indolence and luxury reduces the affluent, it is by no means extraordinary that the women ſhould bear no children, or fewer in proportion than thoſe whoſe ſolids are braced by wholeſome food and conſtant exerciſe. Let the faſhionable couple retire to a cottage, eat plain meats at proper hours, go to reſt and riſe early, walk and ride much in the air; let the lady reſtrain her paſſions, and keep her mind in tranquillity; and ſhe will ſoon be rewarded for theſe reſtraints by the bleſſing of a numerous offspring, whoſe health, vigour, and perfect forms, will amply repay her for the ſacrifices of high living and polite amuſements.

If, however, the habit is ſo far reduced and relaxed, as to require reſtoration from medical aſſiſtance, aſtringent medicines, ſuch as alum, dragon's blood, the chalybeats, and bark, with the Spa, Briſtol, or Pyrmont waters, and the uſe of the cold bath, will be the moſt effectual remedies that can be applied; unleſs the patient has reſolution enough to enter on a milk diet, and perſiſt in it for a few weeks, in which time ſhe will, in all probability, feel the happieſt effects from it, in an unuſual enjoyment of health, ſtrength, and ſpirits.

When ſterility is occaſioned by grief, anxiety, or other paſſions of the mind, the cure lies not with the phyſician; the friends of the patient muſt endeavour to adminiſter comfort, the only remedy that can be offered; and the patient muſt call to her aid ſenſe, reaſon, and religion.

CHAP. V.

Of Pregnancy.

THOUGH pregnancy is not to be conſidered as a diſeaſe, but a natural indiſpoſition of the female body; yet as it is productive of a variety of complaints, and as theſe complaints, if not actually in ſome occaſioned by improper conduct and management, are in moſt caſes aggravated by it; we ſhall give ſome general directions to breeding women, and then point out the ſymptoms of this indiſpoſition, and rules for proper treatment in each particular caſe.

Temperance and regularity are of great importance to women in this condition, and they ſhould be cautious in their choice of food, eating only ſuch as is light of digeſtion, and carefully avoiding whatever turns ſour on the ſtomach, or diſagrees with it; to theſe precautions ſhould be added a free and mild air, and gentle exerciſe, which in the firſt months ſhould be an object of great attention, as violent exertions, agitations, and fatigue of body, are injurious whilſt the connection between the growing burden and the womb is ſlight and feeble.

The paſſions of the mind ought to be attended to with equal regard: man, the natural protector of the female ſex, ſhould at all times guard them with care, and treat them with tenderneſs; but at no time ſhould theſe duties be performed with ſuch exactneſs as in a ſtate of pregnancy. He who is not devoid of all thoſe principles, which can alone make him worthy the bleſſing of being beloved by the moſt amiable part of the creation, will watch over the health of the drooping fair in this important criſis, will endeavour to anticipate all her wiſhes, and to indulge every inclination of her mind, which is not incompatible with her own ſafety, or beyond the reach of his attainment; he will ſoothe her mind with redoubled tenderneſs and affection, indulge even her fancies and caprices, nor interpoſe the ſlighteſt contradiction, without endeavouring to reconcile her mind to the diſappointment by reaſon and argument.

Some regard is alſo due to the manner of dreſſing in this ſituation: tight ſtays are pernicious, acting deſtructively againſt the preſent health of the mother, the future ſafety of the child ſhe bears, and are highly injurious to the nipples, which being depreſſed at this time, are frequently rendered unfit for the office to which they are deſtined.

It is eſſentially neceſſary to keep the body open during pregnancy, and this may in general be effected by a properly regulated diet and gentle exerciſe; ſhould a coſtive habit however occur, ſlight laxatives will anſwer the purpoſe much better than ſtronger purges, and lenitive electuary, magneſia, or prunes ſtewed with ſenna leaves, may be taken occaſionally: if theſe medicines ſhould prove ineffectual, a tea-ſpoonful or two of caſtor oil may be given every three or four hours till ſtools are procured, or a pill or two of the following compoſition may be adminiſtered at going to reſt.

Take of fineſt ſuccotrine aloes powdered, two drams—of caſtile ſoap, one dram—of ſimple ſyrup, enough to make theſe ingredients to a maſs fit for pills, which ſhould be of a moderate ſize.

When the more diſagreeable and troubleſome ſymptoms of pains, cramps, and ſwelled legs, attend the advance of pregnancy, and when the belly becomes ponderous and cumberſome, frequent reſt ſhould be taken in the day on a bed or ſopha, and the woman ſhould be injoined to change her poſture as often as ſhe awakes in the night, to prevent the conſtant preſſure of the womb on any particular part.

The ordinary ſymptoms of breeding in the earlier ſtages of pregnancy, are nauſea, ſickneſs at the ſtomach, and vomiting; heartburn, diarrhœa or looſeneſs, depraved and unnatural inclinations for particular and unwholeſome food, hardneſs, increaſed ſize, and pain of the breaſts, faintings, and nervous or hyſteric fits.

Moſt women are more or leſs ſubject to *nauſea*, *ſickneſs*, and *vomiting*, ſoon after conception. Sometimes theſe ſymptoms are felt in no conſiderable degree, and are of no long continuance; but in other caſes they occaſion ſuch ſtraining, as to produce violent head-aches and bleeding at the noſe, and even in ſome inſtances bring on miſcarriage: theſe complaints are alſo generally accompanied with weakneſs, or languor, depreſſion of ſpirits, and broken ſleep; which, with the cauſes, will frequently give way to air, exerciſe, and amuſement. In young, and otherwiſe healthy women, of full and ſanguine habits, the ſickneſs is commonly more frequent and laſting, and attended with giddineſs, and fluſhes or heats in the face and palms of the hands; and in this caſe bleeding is adviſeable, with a diet rather low and laxative; but in delicate habits, and ſuch as are diſpoſed to nervous diſorders, or where the woman is debilitated by nocturnal ſweats, the frequency of the vomitings or the loſs of appetite, or exhibits other ſigns of general weakneſs, bleeding would be of the moſt pernicious conſequence; and a much more generous regimen will be neceſſary with regard to diet, which ſhould be light and nouriſhing, conſiſting chiefly of teas of animal fleſh, chicken broths, jellies, roaſted chickens, and other young fowls and animals, conſulting as much as poſſible the patient's taſte or preſent inclination, and adding a moderate quantity of good ſound wine; if the weakneſs ſhould be exceſſive, occaſioning ſweats upon uſing common exerciſe, and producing a waſting of the fleſh, light infuſions of the bark, or columbo root, may be given with advantage.

But if the loathings and vomitings become ſo urgent as to threaten danger, it may be prudent to adminiſter a gentle emetic of ten or twelve grains of ipecacuanha, which may not only check the violence of theſe ſymptoms, but if they ariſe from indigeſtion, which is frequently the caſe, will ſtrengthen the ſtomach, and correct that tendency; and theſe vomits may be repeated, at the diſtance of three or four days or a week, as occaſion may require; nor are they at all unſafe, the ſtrainings produced by medicinal emetics being always leſs injurious than thoſe which are occaſioned by natural ſickneſs.

Many breeding women are conſtantly troubled with *heartburn* as ſoon as they become pregnant, and rely on this as a certain ſymptom of their being in that ſtate: this complaint attends ſome women even till they are delivered; others it only accompanies through the firſt ſtages of pregnancy; and, in ſome inſtances, it does not occur till the motion of the child is perceivable. In either caſe little hope can be entertained of totally removing it by art, but by a due attention to the ſtate of the ſtomach it may be rendered leſs troubleſome. Whatever is found to offend or turn ſour on the ſtomach muſt be avoided;

ed; and the diſpoſition to aſceſcency may be corrected by chalk and water, or the chalk julep, by ſmall quantities of weak lime water with an equal portion of milk, or by proper doſes of magneſia; to which, for the purpoſe of ſtrengthening the bowels, and keeping the body open, a few grains of rhubarb may be added occaſionally. If this complaint occurs after every meal, it may be alleviated, for the preſent, by a glaſs of warm water, and a ſmall table-ſpoonful of brandy taken ten minutes after it; and the digeſtion may be aſſiſted by an infuſion of the bark, made in the following way.

> Take of the bark in powder, one ounce—of cinnamon, half a dram. Pour on theſe ingredients a quart of boiling water; let it ſtand till it is cold, then pour it off fine, and give a tea-cupful two or three times a day. If the ſtomach is particularly weak, a tea-ſpoonful of brandy, or of the ſpiritous tincture of the bark, may be added to each doſe.

A *diarrhœa*, or *looſeneſs*, is a ſymptom which frequently occurs, but is attended with very little danger; as it is in general produced by the diſordered ſtate of the ſtomach, it commonly gives way to the correction of thoſe complaints: gentle emetics, ſmall quantities of rhubarb, and a proper regard to diet, are in moſt caſes effectual for the removal of this complaint; when it proves obſtinate, ſmall doſes of opium may be given, but other aſtringents ſhould be avoided, as a ſudden check is rather more dangerous than the diſorder itſelf.

The *depraved inclinations for improper or unwholeſome food* of women in a ſtate of pregnancy, though they have been often the ſubjects of ridicule, and are undoubtedly, in many inſtances, carried to ſuch lengths of abſurdity, as to appear rather the effects of caprice than real diſorder, are certainly in ſome caſes involuntary, and may be accounted for by the weak ſtate of the patient's ſtomach, and the general indiſpoſition of the body, which affecting the mind, renders it wayward, whimſical, and fickle: the only remedy that can be applied to this indiſpoſition is indulgence, which ſhould be carried as far as it can poſſibly be extended without injury or extravagance.

The *increaſe of the ſize of the breaſts*, and the ſtraitneſs and pain occaſioned by it, require no other attention than to obſerve the general directions we have given with reſpect to ſtrictures and coſtiveneſs; if the patient is of a full habit, bleeding may relieve uneaſy ſenſations of this kind, and if the breaſts are remarkably hard and troubleſome, a little ſweet oil may be ſpread over them with a feather, after which they ſhould be covered with flannel or fur; on this, and every occaſion, rubbing ointments or oils on the breaſt ſhould be avoided, the irritation occaſioned by this proceſs being attended with danger, and often producing inflammations inſtead of removing them.

The time of quickening generally proves troubleſome, and eſpecially to women of tender and delicate habits, who are about this time afflicted with *faintings*, or *nervous* or *hyſteric fits*; but they are ſeldom violent, or attended with fatal or dangerous effects. Medicines moderately cordial, reſt, and mental quiet, are the beſt remedies for theſe ſymptoms, except they proceed from accidents, ſuch as blows, bruiſes, or falls; in which caſes ſuch treatment muſt be applied as is adapted to the particular circumſtances. Exceſſive paſſions of anger, or thoſe of grief, vexation, or diſappointment, often endanger the lives of both the mother and child; but the effects of thoſe agitations may ſometimes be prevented by ſmall doſes of opium judiciouſly adminiſtered.

If, in theſe early ſtages of pregnancy, any feveriſh ſymptoms ſhould appear, ſuch as thirſt, heat, wearineſs, an indiſpoſition to motion, and a frequent inclination to ſleep, it may be inferred that there is too great a fullneſs in the habit, which ſhould be corrected by regimen and moderate evacuations; and for this purpoſe, the mild laxatives already preſcribed ſhould be given occaſionally, and the patient ſhould abſtain, in a great meaſure, from animal food, and confine herſelf to a diet of vegetables and fruit, drink frequently of new whey, uſe exerciſe, and avoid cloſe and confined rooms, and the croud and buſtle of public aſſemblies and places of amuſement.

From all or either of the foregoing complaints miſcarriages may happen, if proper aſſiſtance is not interpoſed in time: thoſe which follow, generally take place after the pregnant woman is ſenſible of the motion of her burden, and which ariſing from the weight, ſize, and preſſure of the womb, may bring the life of the mother into danger.

The firſt of theſe is a difficulty or ſuppreſſion of urine; this may be occaſioned by coſtiveneſs, extraordinary fatigue, or ſtanding a long time, either of which co-operating with the natural impediment of the additional weight on the kidnies and bladder, may at firſt prevent the water from flowing with it's uſual freedom, and this obſtruction, together with the cauſes of it, increaſing, may at laſt terminate in a temporary ſuppreſſion; but this is ſeldom of long continuance, or attended with much danger, generally going off ſpontaneouſly, as the womb riſes in the advancing pregnancy.

But if this difficulty or ſuppreſſion of urine ſhould be occaſioned by an unnatural change in the poſture and ſituation of the womb, conſtituting that diſeaſe which is denominated a *retroverſion of the womb*, it is attended with extreme difficulty and danger, and calls for the immediate aſſiſtance of an able and experienced ſurgeon, or phyſician and midwife.

As the pregnancy advances, the *coſtiveneſs* alſo in ſome caſes gains ground; to remove which, and to prevent the diſagreeable conſequences of gripes, pains in the ſtomach and head, piles, and miſcarriage, the laxatives we have before recommended ſhould be adminiſtered till they produce proper effects; and in the mean time clyſters ſhould be injected, compoſed at firſt of warm water and ſweet oil, or Caſtile ſoap diſſolved, and afterwards from two drams to half an ounce of common ſalt may be added by way of ſtimulative.

If the coſtiveneſs ſhould occaſion piles, the pain of them may be alleviated, and the ſymptoms by degrees removed, by the means we have already preſcribed in treating of that diſorder.

Some women, during the latter part of their pregnancy, are ſubject to *ſwellings of the legs and thighs*, and even of the lips of the pudenda, but theſe ſymptoms are rather diſagreeable than dangerous, and occurring only in the day, abate as ſoon as the patient lies down in her bed, and go totally off towards the morning, and can only be alleviated till the removal of the burden by which they are occaſioned; and this may be done by regimen, laxatives, and gentle friction of the parts affected, with a warm flannel cloth or a fleſh-bruſh.

Convulſions ſometimes attend the latter ſtages of pregnancy, and are equally alarming and dangerous; inſtances having occurred where the patient hath expired in one of thoſe fits, which are in general preceded by pains about the womb and ſtomach, and intenſe head-ache; and others, where the children have been forced to the birth in various ſtages of the pregnancy. As theſe diſorders may ariſe merely from the preſſure of the womb, they admit of no certain relief till the delivery; but proper care ſhould be taken to alleviate the ſymptoms, by ſuch treatment as hath been directed in other caſes of convulſions.

Cramps, which may be conſidered as partial convulſions, may generally be relieved by external applications, ſuch as æther, a volatile liniment, or gentle friction with a bruſh or the hand: change of poſture is alſo ſerviceable in theſe caſes; and when the complaint is violent, opiates may be added to the external remedies, and given internally in moderate quantities.

When the time of delivery approaches, *colic* pains are frequently ſo violent as to be miſtaken for thoſe of labour, and ſometimes occaſion unneceſſary buſtle and preparation; but theſe complaints are in general removed by a ſtool, which may be procured by taking a little rhubarb if neceſſary; and great regard ſhould in this caſe be paid to the diet, that no part of the food be heavy or windy, or the liquors heating or inclining to produce acidities in the ſtomach: if theſe colic pains ſhould be aggravated to any degree of continued violence, ſome danger always occurs of inflammations in the bowels, which at all times dangerous, are ſtill more ſo in a ſtate of pregnancy, when the diſtenſion of all the parts renders them peculiarly liable to be affected in this way; and in theſe caſes, bleeding, clyſters, and opening medicines, muſt be relied on; ſpirituous liquors and heating cordials, too commonly given on ſuch occaſions, are of the moſt pernicious nature.

Many other complaints beſides thoſe we have mentioned may occur in the courſe of pregnancy; ſome actually occaſioned by that ſtate, and others which are aggravated by it, though they had exiſtence before: but as we have already treated of moſt of thoſe which may poſſibly be relieved without medical aſſiſtance, and as moſt of the others are either caſes which are attended with much danger, or require manual help or ſome operation, we do not conſider the notice of them as eſſential in this work.

CHAP. VI.

Of Miſcarriage.

MISCARRIAGE, or *abortion*, is the excluſion or thruſting forth of the *ovum* or fœtus before it is arrived to a ſtate of perfection: if the child is born alive before the natural time, it is commonly called a *premature birth*; and if it happens within the firſt month, it is ſaid to have been a *falſe conception*.

The ſize of the *ovum*, or child in embrio, generally increaſes in the following proportions: in ſix weeks after conception it arrives to the ſize of a pigeon's egg; at the end of eight weeks, it may reach to that of a hen; and in twelve weeks, it does not commonly exceed the bigneſs of a gooſe egg.

Miſcarriages are more frequent between the ſecond and third month than at any other period; they happen however commonly in the fourth and fifth, and till the pregnancy is ſo far advanced are ſeldom attended with any great degree of danger; though a repetition of abortions impairs the conſtitution, and lays the foundation of other diſeaſes, which may owe their exiſtence, and the fatal conſequences which attend them, to this cauſe.

Many diſorders are alſo conſequent to frequent miſcarriages; ſuch as the fluor albus or whites, the returns of violent floodings, nervous and hyſteric complaints, and all the train of ſymptoms which are the uſual companions of general weakneſs.

The cauſes of miſcarriage may be diſeaſes, weakneſs, or relaxation of the mother; diſeaſes of the navel-ſtring, ſuch as knots or doublings in it, or it's being twiſted round the child's body, and by preſſure preventing the circulation of the blood through the veſſels; diſeaſes of the fœtus itſelf, or accidents received by it or by the mother, and communicated to it: miſcarriage may alſo be occaſioned by too copious evacuations; by violent exertions of ſtrength, in lifting weights or hard labour; by exceſſive exerciſe of walking or riding; by ſtraining the body in over-reaching it; by ſudden ſhocks in jumping, leaping, or falling; by blows, bruiſes, and other external injuries; by ſtraining in vomiting, coughing, or going to ſtool; by other diſeaſes, ſuch as fevers, convulſions, epilepſies, or ſmall-pox; by over-fulneſs of blood, luxurious living, and inactivity of life; by ſurfeits, occaſioned by eating, or produced by fœtid and diſagreeable effluvia; by the exceſſes of the paſſions of the mind in anger, grief, joy, or vexation; and by frights and ſudden impulſes of fear.

The ſymptoms of approaching abortion, are pains in the back, loins, and belly; a dull, heavy ſenſation of pain in the thighs, and particularly in the inſides of them; ſickneſs or nauſea at the ſtomach, and palpitation of the heart; bearing down pains like thoſe of child-birth, with regular intermiſſions, and accompanied with alternate ſhiverings and heat; the evacuation of water, or blood and watery humour, from the womb; the ſubſiding of the belly, ſoftneſs and flatneſs of the breaſts; and, in advanced pregnancies, the ceſſation of motion, and other ſigns exciting ſuſpicions of the death of the child.

Miſcarriages might frequently be prevented by the exerciſe of common prudence, and the uſe of ſuch precautions, as different habits and conſtitutions may require, and reaſon will in moſt caſes ſuggeſt.

Weak and watery liquors, taken in conſiderable quantities, encourage nervous diſorders, and are therefore prejudicial: we cannot ſuppoſe that any opinion we could offer would induce the female ſex to forego the pleaſures of drinking tea, but we cannot help exhorting them to be moderate in the uſe of it, and by no means to pour it down their throats ſcalding hot, or to take it at unſeaſonable hours.

Moderate exerciſe, taken conſtantly, with the benefit of freſh air, is of great importance, bracing up the ſolids, and enabling the frame to ſuſtain the increaſing weight; nor is proper reſt of leſs conſequence: the breeding woman ſhould be at leaſt nine hours in her bed, but her reſt ſhould be taken at night, not at noon, and for this purpoſe ſhe ſhould go to bed and riſe early; the air of the morning is much more beneficial than that of mid-day.

The diet ſhould be adapted to the habit: thoſe who are full of blood and juices ſhould be ſparing, and avoid wine, ſpirits, ſpices, and every thing of a heating quality, or which tends to add to the fluids, and the diet ſhould be opening, cooling, and conſiſt more of vegetables than fleſh; thoſe who are of thin, delicate, and tender frames, and whoſe habits are leſs robuſt, ſhould feed and drink more generouſly, avoiding, however, meats hard of digeſtion, and particularly ſuch as are ſalted or dried.

If, from circumſtances againſt which human foreſight cannot guard, ſymptoms threatening a miſcarriage ſhould appear, the woman ſhould be confined to her bed, or rather laid on a mattraſs, with her head lower than her body, and ſhe ſhould be kept in that ſituation till the alarming ſymptoms are removed; her body ſhould be kept open, and her mind ſhould be ſoothed into calmneſs and tranquillity; her food ſhould conſiſt of rich and nouriſhing broths and jellies, ſago or panada with

Port wine, rice milk or oatmeal gruels boiled to thickneſs; and every thing ſhould be taken either cold, or as nearly ſo as the ſeaſon will permit, and in very ſmall quantities at a time: her drinks may be whey, barley water, or herb teas, with lemon-juice and ſugar; and ſhe may take a ſmall quantity of nitre, from a ſcruple to half a dram, every ſix hours, in a tea-cupful of her common drink. A decoction of calcined hartſhorn prepared, may be uſeful in caſe of a looſeneſs; and a diſpoſition to vomit may be checked by giving now and then a ſpoonful of a ſaline mixture; and a gentle opiate may be taken the laſt thing at night; yet though theſe medicines are frequently uſeful in ſuch caſes, we would recommend their being adminiſtered ſparingly and with caution.

In moſt caſes ſome blood ſhould be taken away, and eſpecially if the patient is hot, fluttered, in much pain, and generally feveriſh; the quantity muſt be determined by habit, conſtitution, and other circumſtances.

If, notwithſtanding theſe precautions, the flooding ſhould come on, and a miſcarriage appear to be inevitable, every lump or clot that is paſſed off ſhould be put into a baſon of water, and examined, as it is of importance to the future treatment, to diſcover when the fœtus hath been excluded.

The dilatation of the orifice of the womb, to admit the paſſage of the abortion, is very often ſlow and painful in the early ſtages of pregnancy; the frequent repetition of clyſters, ſlightly ſtimulating, is ſometimes of great uſe in ſuch caſes, to promote the expulſion of the fœtus, the throes to effect the diſcharge of which increaſe the flooding, and bring on very diſagreable ſymptoms.

If the placenta, or after-birth, ſhould remain after the fœtus hath been brought off, it will ſometimes come away in pieces, at the diſtance of a week, or even ten days, after miſcarriage, attended with a very putrid and offenſive diſcharge: in this caſe great care ſhould be taken to keep the parts perfectly clean, by frequent injections of warm milk and water, or of an infuſion of the bark, with a ſmall quantity of tincture of myrrh; and by this means inflammations of the womb, or even mortifications, which are nor not unfrequently the conſequences of this circumſtance, may probably be happily prevented.

Ingenious writers on theſe ſubjects have given a caution, which ought by no means to be diſregarded. It ſometimes happens, in caſes of double or triple conceptions, that the growth and progreſs of one may be interrupted by another, and may in conſequence of this interruption periſh, and be afterwards expelled by miſcarriage, the remaining conception being uninjured and capable of arriving to perfection: on this account attention ſhould be paid to the ſituation and appearance of the woman after every miſcarriage, in order to obſerve whether a real pregnancy ſtill exiſts; which will be diſcoverable in the earlier periods, by the breaſts continuing plump and full, and in more advanced pregnancy, by the increaſe of ſize and weight, and the ſenſe of the child's motion.

After a miſcarriage proper means ſhould be taken for the recovery of the patient's health and ſtrength; ſuch as change of air, gentle exerciſe, and the uſe of the bark and mineral waters.

CHAP. VII.

Of Floodings.

AS *floodings* frequently happen during pregnancy, which yet do not terminate in abortion, it may be proper to mention the general cauſes of theſe appearances, the circumſtances with which they are attended, and the method of management in ſuch caſes.

And this flooding is not to be underſtood to mean the accuſtomed periodical diſcharge of women, which ceaſes ſoon after conception; but an evacuation of blood from the womb, happening at unfixed and uncertain periods.

The immediate cauſe of this diſcharge, is either the ſeparation of ſome part of the ſurface of the ovum or fœtus from the womb in the firſt ſtages of pregnancy, or of ſome portion of the placenta in the more advanced ſtate: and theſe ſeparations may be occaſioned by external accidents, ſuch as ſtrains, blows, bruiſes, or falls; or by over-fullneſs of blood, high living, fevers, violent paſſions of the mind, or exceſſive exertions of the body; and by whatever is heating or quickens the circulation of the blood.

It may alſo ariſe from particular diſeaſes, affecting either the womb, the placenta, or the fœtus itſelf; from irritation, communicated to the womb from other parts of the body; from agitation of the body in coughing or vomiting; or from ſuch diſorders as, affecting the bladder or other inteſtinal parts, occaſion difficulty and ſtraining in making water.

No extraordinary degree of danger to the mother attends theſe floodings during the firſt five months of pregnancy, though miſcarriage is ſometimes unavoidably the conſequence; but after that period the increaſed ſize of the womb and blood-veſſels may occaſion ſo very great a loſs of blood, as to bring both the mother and the child ſhe bears into a ſituation the more hazardous, becauſe it is difficult to give it ſuch a check as may prevent it's return, which is very apt to happen on the leaſt agitation of the body or pertubation of mind.

The quantity of the diſcharge, the degree of pain with which it is accompanied, and the appearance of the blood, will in a great meaſure determine the danger of miſcarriage; if the former are moderate, and the latter of a lively red colour, unmixed with lumps or clots, or with ſubſtance of a fleſhy conſiſtence, or a watery fluid, hopes may yet be entertained that the evacuation may be rendered leſs violent, and the returns leſs frequent, and that the mother may be enabled to preſerve her child: if none of theſe favourable ſigns occur, a miſcarriage will hardly be prevented.

To leſſen this diſcharge, it will be neceſſary to ſtop in ſome meaſure the impetuous circulation of the blood, or to keep the body in a certain poſition, which may encourage the coagulation of the blood into ſuch clots as may fill the mouths of the veſſels, and ſtop the current of blood.

To effect theſe purpoſes, a ſmall quantity of blood may be taken from the arms, and the patient ſhould immediately be ordered to her bed, which ſhould on ſuch an occaſion conſiſt of a mattraſs, ſtuffed with hair inſtead of down or feathers; ſhe ſhould ſleep alone, under a light covering; as much air as poſſible ought to be admitted to her, and the utmoſt care ſhould be taken that her mind is not diſturbed by fear, fright, or anxiety, or agitated by anger, diſappointment, or vexation: the diet ſhould be light and cooling, taken in ſmall quantities at a time, and quite cold.

Whether the relief afforded by opiates ariſes from any particular ſtyptic power reſiding in theſe medicines, or whether it is produced by their general operation, as anodynes, in allaying the ferment and nervous irritation, certain it is, that they are of particular uſe in theſe caſes, and under proper caution may be given with conſiderable advantage, where the habit is not remarkably full, or the fever high; when either of thoſe circumſtances occurs, or where the patient is coſtive, opiates are improper till the veſſels and bowels are emptied by proper evacuations; the former muſt be done by bleeding in the arm, and the latter by emollient clyſters of the moſt ſimple and innocent compoſition, and adminiſtered in a very moderate ſtate of warmth.

But if the flooding is ſo exceſſive, as not only to endanger abortion, but even the death of the unfortunate mother, napkins, folded many times double, and dipped in vinegar and water, may be applied to the loins and the very lower extremity of the back-bone, and as often as they grow warm freſh ones ſhould be immediately applied.

The laſt effort that can be made, when all attempts to check the diſcharge of blood prove abortive, is to procure as ſpeedy an excluſion of the fœtus, or birth of the child, according to the ſtate of the pregnancy, as poſſible; but as this can only be performed by proper aſſiſtance, we ſhall avoid giving any directions on this head.

CHAP. VIII.

Of Child-birth.

IT is by no means our purpoſe to give inſtructions for the delivery of pregnant women, or to advance a ſingle word on a ſubject, which is almoſt generally in the hands of men of learning, judgment, and humanity, equally capable of reſcuing their patients from many of the perils of child-birth, to which the ſex have been too long expoſed, and of preſerving the infant from mental and corporeal infirmities, which were too often the conſequences of their being victims to ignorance and inhumanity in the moment when they were to be uſhered into exiſtence, and when the health, comfort, and happineſs of their future lives, depended on the conduct of thoſe who, from miſtaken principles of delicacy and decorum, were permitted to undertake an office for which they were neither qualified by knowledge, education, or ſtudy.

Not that we would be underſtood to inſinuate, that all female midwives are alike incapable or inattentive; many of thoſe too have improved their knowledge by experience, and being equal to the taſk they undertake in all common caſes, poſſeſs candour and integrity enough to call for aſſiſtance whenever any difficulty occurs.

Yet we apprehend there are others not altogether ſo well informed or well diſpoſed, and to theſe we beg leave to offer a few hints, which may be of uſe to them in their practice, and which, being duly regarded, may tend to encreaſe it, and add to their ſtock of reputation.

The firſt caution which occurs, is that of perfect ſobriety, and we truſt our female readers of this profeſſion will pardon a ſuggeſtion, which ſeems to imply ſome charge of failure in this moſt eſſential point: we are well aware, that indiſcretions of this ſort are far from being general, but the conſequence of one ſuch inſtance muſt be too fatal not to merit our preventive notice.

Patience is another virtue of great importance in the exerciſe of this profeſſion: Nature herſelf, if her operations are attended to, will in all common caſes expel the child with very little aſſiſtance; the leſs is given the better in moſt inſtances, at leaſt it ſhould never be offered till the natural advances demand it; attempts to forward or haſten labours are always imprudent, generally uſeleſs, and at moſt times dangerous.

The laſt piece of advice which we ſhall offer to female practitioners, is to diveſt themſelves of vanity upon theſe occaſions; if they are puzzled, or entertain doubts, always to give way to this diffidence, and with a degree of ingenuouſneſs, which will ever inſure them reſpect and regard, to confeſs the difficulty, and require the aſſiſtance of a ſurgeon or phyſician. To aſſumed knowledge and falſe conſequence in this particular many a valuable life has been ſacrificed, and many huſbands and families have been left to deplore misfortunes, which might have been avoided by an open and diſintereſted conduct.

In addreſſing thoſe women who make the attendance on females in this ſituation their only or principal employment we ſhall uſe leſs reſerve: we know ſome, even among this claſs, whoſe ſobriety, honeſty, obedience to directions, and tenderneſs, would do honour to higher ranks in life; but we are ſorry to ſay, that theſe virtues cannot with juſtice be aſcribed to the generality of thoſe who are engaged in this way of getting a livelihood; to conſummate ignorance they are too apt to add an obſtinate opinion of their own ſelf-ſufficiency, and to a ſordid regard to their own intereſts is joined that kind of hardened inhumanity, which leaving them ſtrangers to the emotions of pity or compaſſion, induces them to pay leſs attention to thoſe they undertake to nurſe than to themſelves, and occaſion neglect and every ſpecies of miſmanagement.

Happy ſhould we think ourſelves, if to this liſt of failings we were not obliged to add, in many inſtances, want of ſobriety; a fault in theſe particular caſes of ſo deſtructive a nature, that no ſeverity can be equal to the due puniſhment of it.

In favour of a ſober, vigilant, and tender nurſe, too much cannot be ſaid; and ſo highly important do we conſider this office, that we earneſtly wiſh ſome method could be adopted, by which the characters, as well as the capacities of thoſe who engage in it, might undergo a public examination; and that ſome ſuitable proviſion might be made for thoſe who, in the faithful diſcharge of the truſt, have paſſed through a life of fatigue and labour, and have acquired the infirmities of old age, before they have been enabled to lay up a competency for their ſupport; and who having ſpent the noon of life in virtuous induſtry, are condemned to pine through the evening of it in poverty and wretchedneſs.

Having thus diſcharged our duty, in reminding midwives and nurſes of theirs, we ſhall proceed in this chapter to lay down ſuch rules for the treatment and management of women after delivery, as may be of general uſe to all claſſes of people, who are either intereſted in the ſafety and welfare of thoſe who are in this critical ſituation, or are engaged in giving them attendance; and by a due attention to which, many of thoſe evils may be prevented or averted, which we ſhall have occaſion to deſcribe in ſome ſubſequent chapters.

It may however be neceſſary to caution nurſes againſt attempting to ſupport the ſtrength and ſpirits of the woman, during actual labour, by ſpirits, cordials, and wines, which tend only to add to the fever, inflame the womb, and increaſe the difficulty

culty of delivery, and to occaſion future dangerous, and very often fatal conſequences, in fevers of various kinds, or violent and exceſſive floodings.

That no very extraordinary degree of ſkill is required in treating women after delivery, in ſuch a way as to prevent moſt of the diſorders incident to this condition, is evident from the number of women who, without any care or management at all, eſcape the dangers of child-bearing, and go through the perils of labour without hazard or inconvenience.

But prudence and caution are not to be neglected, becauſe thoſe who are devoid of both are ſometimes preſerved; nor are we to think the exerciſe of them at all leſs neceſſary, from the frequent inſtances which occur of ſucceſsful folly. When the fatal blow is ſtruck, it will be too late to repent of our temerity; nor ſhall we derive conſolation from the reflection, that we apprehended our friend might have fared as well as other women in the ſame ſtate.

And indeed the ſuggeſtions of common ſenſe, with a very few plain rules, and a watchful attention to the operations of Nature, whoſe dictates will be the beſt guide on this occaſion, will be in general ſufficient to conduct the lying-in patient in ſafety through the various changes of this critical period, and to avert the diſeaſes to which women in this ſituation are peculiarly liable.

But as theſe diſeaſes, under neglect and improper treatment, are more apt to be fatal than moſt others, we muſt recommend to the midwife of either ſex, an early attention to the approach of every complaint, and a ſpeedy application of preventive remedies: diſorders are much more eaſily prevented than removed, and if the firſt ſigns of threatening illneſs are duly regarded, the moſt dreadful and dangerous ſymptoms may in moſt caſes be obviated.

After the child is born, and the afterbirth extracted, the firſt attention is due to the woman, as the infant may remain without injury till the ſafety of the mother is provided for; who ſhould be ſuffered to reſt a little, and a ſtill longer time if there are any appearances of flooding or fainting, a dry and warm cloth being in the mean time applied to the body.

As ſoon as ſhe can be moved with ſafety and convenience, all the wet cloths about her ſhould be carefully and cautiouſly taken off, and ſhe ſhould be ſupplied with others properly dried and warmed; and a napkin, or other cloth of ſufficient ſize, folded ſeveral times double, may be laid over the belly, and ſecured by being faſtened to the band of the ſhirt or petticoat which ſurrounds the waiſt: if the weather is cold, or the woman has been accuſtomed to warm cloathing, her belly and ſtomach may be covered with flannels; if ſhe has ſweated much in her labour her head-dreſs will alſo require to be changed, and every thing poſſible ſhould be done to render her comfortable.

In caſe of faintings, ſpiced and hot wines and caudles are extremely improper, and ſtill more ſo are ſpirituous liquors; if ſomewhat is neceſſary to be given, it ſhould be either ſimple cinnamon water, or a bit of bread dipped in wine, but whatever is taken ſhould be cold: if wine is apt to diſagree with the patient, a ſmall quantity of ſpirits, diluted with water, may be ſubſtituted.

After the woman has lain quiet a proper time, and recovered in ſome degree from the fatigue of her delivery, a ſmall baſon of gruel or panada may be given her, with wine in it; when the labour has been long and ſevere, a little warm negus is allowable.

The diet muſt in general be regulated by the woman's uſual manner of living at other times, and by the diſcharges after child-birth: if theſe are copious, and the mother ſuckles her child, greater liberties may be given in this reſpect than when the milk is to be repelled, and when theſe diſcharges are inſufficient in quantity to anſwer the purpoſes for which they are intended: water-gruel, panada, ſago, and ſpoon-meat of the like kinds, are generally directed for the firſt two or three days; after which chicken broth, veal broth, or beef tea, and, in ſucceſſion, chicken, partridge, young rabbit, light puddings, and ſuch eaſily digeſted food, may be permitted. Some women have a particular diſlike to thoſe ſpoon-meats which are uſually termed ſlops; and ſuch, as well as thoſe who have been accuſtomed to live high, muſt be indulged with the animal broths and fleſh from the beginning.

The drinks ſhould be barley or oatmeal water, water with a toaſt, or whey; and ſome recommend in the ſummer, lemonade or other acid juices of fruits, with water and ſugar, and adviſe theſe liquors to be taken quite cold, though they admit of their being warmed in winter. If the mother abandons her child to be nouriſhed by the milk of a ſtranger, which ſcarce any thing but actual inability will juſtify, ſhe ſhould be ſparing in the uſe of liquids, and eat freely of the ripe fruits of the ſeaſon.

But when the mother propoſes to diſcharge her duty to her offspring, and to execute herſelf the moſt important and pleaſing office of a mother, the child ſhould be put to the breaſt as ſoon as the appearance of milk and the ſtrength of the woman will admit, which is in general about twelve hours after the birth; and this practice anſwers the various purpoſes of cleanſing the child from the meconium, or accumulation of fœces in the bowels, encouraging the flow of milk, and preventing the bad effects which the detenſion of too great a quantity of that fluid in the breaſt will in moſt caſes occaſion, and in particular thoſe painful ſwellings and inflammations of the breaſts ariſing from obſtructions, or from the irritation of them by efforts of violence to draw the milk. The child, however, ſhould not be put to the breaſt too often, nor ſuffered to remain there long enough at a time to fatigue the mother; who ſhould be raiſed in her bed, and ſupported with pillows, in a proper poſture of eaſe and convenience, whenever the child is permitted to ſuck.

A variety of methods have been preſcribed for the diſcuſſion or diſperſion of the milk; but unleſs ſome particular complaint occurs, few other precautions are neceſſary than to keep the breaſts warm and dry: if, however, they ſhould be very much diſtended, and grow hard and painful, a little ſweet oil warmed, and laid over the breaſts with a feather, will in almoſt every caſe remove theſe inconveniencies; but either rubbing in any unctuous matter, or endeavours to extract the milk forcibly, are prejudicial; in moſt inſtances the diſagreeable ſenſations which ariſe from checking the milk, are but of ſhort duration, terminating moſt commonly, in the courſe of twenty-four or forty-eight hours, either in a profuſe ſweat, attended with a ſour ſmell like that which accompanies perſpiration in the gout, in a diſcharge from the bowels, or the ſpontaneous evacuation of the milk from the nipples.

Women in child-bed are as ſubject to coſtiveneſs as during pregnancy, and the ſame medicines may be adminiſtered to keep the body open, ſuch as a laxative pill, lenitive electuary, or magneſia: if the habit is peculiarly obſtinate, emollient clyſters will be neceſſary, for the bowels ought at any rate to be kept eaſy; and when the milk is repelled, it will be requiſite to procure two or three ſtools a day for ſome time.

The abſurd idea that clean linen would be pernicious to women in this condition is in a great meaſure exploded, nor is it eaſy to conceive how ſuch prejudices could ever prevail, or that any perſon of common underſtanding could believe it more ſalutary to the unfortunate patient to be confined to dirt, filth, and the fœtid effluvia of her cleanſing diſcharges, than to give her clean and dry linen, and regale her with ſmells agreeable to her ſenſes: it is not only proper to remove the cloaths ſhe had about her at the time of delivery as ſoon as poſſible, but to change her linen frequently afterwards; even once every day will not be at all too often, if the after diſcharges are copious, or the woman is ſubject to ſweats.

Another old cuſtom of equal abſurdity has now alſo happily given way to the unfettered exerciſe of reaſon; inſtead of keeping the woman in bed nine days, which uſed to be done with religious and ſcrupulous exactneſs, it is now the univerſal practice to let her be taken up to have her bed made the third day after delivery, if no extraordinary degree of weakneſs or other diſagreeable ſymptoms appear: the evening is the time commonly preferred for the firſt taking the lying-in patient out of bed, becauſe, as the hour of ſleep is at hand, ſhe may have a ſpeedier opportunity of recovering from the fatigue of riſing; but if ſhe is particularly weak, or is apt to be much affected with being taken up, the morning may be a better time, as ſhe will be then leſs exhauſted than towards night; but whatever hour is thought moſt adviſeable, ſhe ſhould only remain out of bed the firſt time long enough for it to be put in order, and continue to prolong the time of ſetting up gradually day by day.

The chamber in which the woman lies in ſhould be as large and airy as poſſible, nor ſhould ſhe be excluded the benefit of freſh air, which may after forty-eight hours be admitted from a window or door, under proper precautions that the current of it does not fall on the patient; nor ſhould the curtains be wholly cloſed, or the bed loaded with an unuſual quantity of cloaths: though a gentle perſpiration is ſerviceable, and ought not to be diſcouraged, yet care ſhould be taken that it does not increaſe to a ſweat, which is always injurious, weakening the patient, and frequently bringing on eruptive complaints of a very diſagreeable nature; even where the diſpoſition to ſweat is natural or habitual, it ſhould be checked as far as is conſiſtent with ſafety and prudence, and the linen both of the bed and body ſhould be frequently changed, as it is exceedingly pernicious when it is ſaturated with ſweat.

The heat of the room muſt be regulated by the ſeaſon of the year, and the warmth of the weather; in ſummer there ſhould be no fire in the room, nor ſhould the chimney be ſtopped; in the winter, a moderate and equal heat ſhould be kept up, but even in cold weather the air ſhould be often changed, by opening a window or the door for a few minutes.

Quiet of body and mind are eſſentially neceſſary to the ſafety and ſpeedy recovery of lying-in women. The cuſtom of crouding the room with goſſips during the labour is abſurd, and often productive of ill conſequences; but it is ſtill more prejudicial after delivery, when the patient ſhould remain as undiſturbed as poſſible, nor ſhould her reſt be interrupted, even for the purpoſes of giving her refreſhment, which though often required, are yet leſs neceſſary than repoſe: it may perhaps be much more prudent to permit the nurſe to ſleep on a chair, or on a ſopha, in the ſame room, than by compelling her to be conſtantly awake, to prompt her to ſuch an officious attention to the woman committed to her care, as may induce her to rob her of her beſt cordial, ſleep, to adminiſter ſuch to her as are probably unneceſſary, and ſometimes hurtful.

Nor muſt we omit to caution nurſes againſt the pernicious cuſtom of giving caudle with wine or ſpirits, or either of thoſe liquors alone or mixed, at any hour of the night when the woman in child-bed happens to awake; diluting liquors only ſhould be at any time given between the meals, but any thing of a heating quality taken in thoſe hours which ſhould be dedicated to repoſe, ſerves only to increaſe the patient's reſtleſſneſs, and add to the fever which occaſions it.

But unleſs the mind is kept at eaſe, all other regulations and preſcriptions will be of little uſe; if the paſſions are diſturbed or agitated, the body will ſuffer in a greater proportion. Care ſhould be taken to conceal from the lying-in woman any thing diſagreeable which may occur, either concerning herſelf, her family, or friends; nor ſhould leſs caution be uſed in avoiding to thwart her inclinations or contradict her opinions; the mind is at this time in ſo irritable a ſtate, that perturbations of any kind are dangerous, and may bring on reſtleſſneſs, fevers, convulſions, frenzy, or even death itſelf.

The infatuation of permitting the lying-in woman to receive viſits from all her particular acquaintance, within a day or two after her delivery, is often productive of the moſt fatal conſequences; ſo prejudicial is noiſe of any kind, that it cannot be too carefully guarded againſt: knockers and bells are with great propriety muffled, and ſtraw laid in the ſtreets, to prevent the rattling of carriages from being offenſive; yet the worſt diſturbance of all is too often unheeded, and crowds of tittle-tattle friends are admitted, who not only harraſs the patient with their converſation, but add to the injury, by compelling her to join in it; every man who regards the ſafety of his wife ſhould ſhut his doors againſt ſuch unneceſſary intruders, and whilſt even the light is excluded, leſt it ſhould be too powerful for the woman's ſpirits, care ſhould be taken to prevent her from being obliged to endure a fatigue to which even health itſelf is hardly equal.

Nor is fatigue the only effect of theſe intruſions; at ſuch viſits the tale of the day circulates, and if any unfortunate woman in the neighbourhood, in the like condition, has been talked or worried into a fever, which has terminated in death, the ſtory of a perſon dying in child-bed is dreſſed out with all the aggravating circumſtances of horror, aſcribed to any cauſe but the right, and ſerved up to the unhappy object of the preſent viſit, who is no ſooner left alone, that ſhe diſcovers ſymptoms of indiſpoſition in herſelf, and not uncommonly becomes a martyr to the fears induced by ſuch incautious communications: that ſuch knells are more frequently injurious than thoſe which are rung from the pariſh ſteeple might eaſily be proved; though theſe laſt mentioned relicks of ſuperſtition might be omitted without prejudice to the cauſe of religion, and with ſingular advantage to thoſe who are indiſpoſed in health, or oppreſſed in ſpirits.

Some recommend opiates after a very hard or painful labour, and preſcribe from half a grain to a grain of opium in a pill, or from twenty-five to thirty-five drops of liquid laudanum in a ſpoonful of cinnamon-water, or of the common drink, to be taken the firſt night after delivery, and repeated for three or four ſucceeding ones, to prevent reſtleſſneſs or after-pains; but we apprehend neither theſe or any other medicines will be neceſſary, if the patient is treated as we direct, and kept in a ſtate of quiet and tranquillity of mind; however, in caſes where ſuch help is actually required, and opiates diſagree, occaſioning ſickneſs, pain, or giddineſs of the head, from twenty to thirty grains of newly powdered Ruſſian caſtor may be ſubſtituted with advantage: perhaps a draught of mild ale or porter may be as conducive to reſt as either of theſe medicines, where the patient is uſed to malt liquors, and ſuckles her child; but this is an indulgence that muſt not take place till the fourth or fifth day, when the redneſs of the diſcharge begins to abate, and all danger of a milk-fever is at an end.

CHAP. IX.

Of the Diſeaſes incident to Child-birth.

IT is ſomewhat extraordinary, that, conſidering the critical ſituation of women at this moſt important criſis, they ſhould in general be left ſo much to chance; and that leſs caution and prudence ſhould be exerciſed in averting evils which are ſo frequently productive of the moſt fatal conſequences, than in avoiding the common and much leſs conſequential hazards of colds, fevers, or ſlight infections: ſurely the ſafety of a mother muſt be worth the utmoſt degree of attention that can be beſtowed on it, whoſe exiſtence is equally intereſting to her family, and beneficial to the ſtate.

Nor are the diſeaſes uſually attendant on this ſtate to be attributed to neglect only; ignorance has a conſiderable ſhare in the miſchief, and obſtinacy compleats the deſtructive ſyſtem: of all the ſituations of bodily danger, ſcarce any can equal that of a woman in child-bed, in the hands of neglectful and careleſs friends, an ignorant midwife, and an obſtinate nurſe.

It ought in every caſe to be the buſineſs of the lying-in woman's friends to call upon the midwife for frequent attendance during the firſt week or ten days after her delivery; within this ſpace of time moſt of the diſeaſes incident to that ſtate appear, and if they are attended to on the firſt ſymptoms, and in the early ſtages, they are for the moſt part more troubleſome than dangerous, and will in general yield to ſome alteration in regimen, with little or no aſſiſtance from medicine; but if they are permitted to gain ground, the moſt fatal conſequences may always be dreaded: nor will it appear at all extraordinary, if we conſider the ſituation of the patient, whoſe ſtrength has been worn down by the fatigue of a pregnancy, and exhauſted by the pains of a recent labour.

Theſe dangers might alſo be often avoided, if nurſes would be leſs bigotted to their own opinions, and leſs inclined to practice certain experiments, which having been ſanctioned by the authority of ancient uſage, have been handed down from nurſe to nurſe in ſucceeding generations, and without any other pretence for their being retained, are brought forward on every occaſion, to the riſque of health in moſt caſes, and the hazard of life in many.

They ſhould be ſtrictly enjoined to obey implicitly the directions of the learned or experienced midwife; never to obtrude a judgment of their own; or, what is too common, to deviate from theſe inſtructions, and at the ſame time aſſert that they have conformed to them, practiſing two-fold deceit, and inducing the phyſician or midwife to give up, as unſucceſsful, an untried preſcription, and perhaps offer another much leſs efficacious than the former.

It is the duty of a nurſe to watch attentively every change in the perſon ſhe attends, to mark the approach of any diſagreeable ſymptom; and, inſtead of attempting to remove it by any endeavours of her own, to give immediate notice to the friends of the patient, that proper advice may be had in thoſe precious moments, when the progreſs of diſeaſe may yet be ſtopped, and the impending dangers averted.

Nor muſt we neglect to caution the lying-in woman againſt deceiving herſelf, by ſuppreſſing diſagreeable ſymptoms as they occur, and by avoiding to complain, purchaſing preſent indulgencies at the price of certain danger and probable deſtruction.

We truſt caution againſt vanity in theſe ſerious moments muſt be unneceſſary; though we cannot help acknowledging, that we have ſometimes obſerved, with great concern, ſacrifices made of ſafety and recovery to dreſs and appearance.

The diſeaſes to which women are peculiarly liable after child-birth, are *faintings*, exceſſive *floodings*, *after-pains*, *inflammations of the womb and breaſt*, *irregularities in the lochea* or *cleanſing diſcharges*, *ſore nipples*, and *fevers* of ſeveral different kinds.

Slight degrees of *fainting* are neither of long continuance or attended with any conſiderable danger: this ſymptom ſometimes appears after common and mild labours, and may be accounted for by the ſudden removal of an extraordinary weight and preſſure, from the inſtantaneous evacuation of a large quantity of blood, and from the immediate departure of that intenſe and agonizing pain, which held nature upon the rack, and ſo compleatly exhauſted the ſtrenght, that the ſuſpenſion of the torture, and of the faculties which endure it, naturally took place together.

In theſe faintings no danger is to be apprehended whilſt the breath continues diſtinct and the pulſe regular; whilſt neither the extremities or the body are particularly cold; when there is no extraordinary oppreſſion or palpitation, and no ſuſpicion is entertained that the womb has been injured, either in delivering the child from it, or extracting the after-birth.

In moſt of theſe caſes, unaccompanied with any of the foregoing ſymptoms, relief may be obtained by the admiſſion of air, and the adminiſtration of any ſimply cordial medicine. Perhaps warm and dry cloths placed under the woman, ſo as to free her from the inconvenience of the wet things about her, would contribute as much as any thing to the removal of this complaint.

But when all or any of theſe ſymptoms occur, and when the faintings are alſo attended by exceſſive floodings, the danger is ſo extreme, that unleſs the complaints can be checked, the patient hardly ſurvives a few hours: in ſome of theſe caſes the aſſiſtance of an able ſurgeon is required; but if ſuch help is not at hand, cordials and light nouriſhment muſt be given in the intervals of fainting, and warm flannels ſhould be continually applied to the breaſt, belly, and extremities, and bladders of warm water to the feet; the calves of the legs ſhould be rubbed with a warm hand, and Hungary water poured on the wriſts and in the palms of the hands.

But no attempts ſhould by any means be made to rouze the patient out of theſe fainting fits by any act of violence, or by pouring any volatile ſpirits up the noſe, or holding it to the noſtrils; if any ſuch ſtimulating or irritating matter ſhould be involuntarily drawn up the patient's noſe, while ſhe remains in ſuch a languid ſtate, it might occaſion ſuffocation, or bring on ſuch violent coughing or ſneezings, as to increaſe the flooding rapidly, and prove fatal in a very few minutes: if it is abſolutely neceſſary to endeavour by ſome means to bring back the patient's life and ſenſe, after they have appeared to be ſuſpended for ſuch a length of time as to indicate immediate danger, linen cloths dipped in cold vinegar may be applied to the noſtrils, and replaced by others as they get warm and dry.

Such immoderate and exceſſive *floodings* as conſtitute a diſeaſe, and bring on danger, may be occaſioned by violence uſed in attempting to extract the after-birth, by dragging the navel-ſtring before the womb has had time to contract, or by tearing it and bringing it away in different pieces; by a want of contracting power in the womb, either from diſtenſion by a large burden, or by weakneſs produced by a long and ſevere labour: this diſeaſe may alſo be the effect of treating the patient improperly during the labour, admitting her to be ſuffocated by the cloſeneſs of the room, or the numbers of people about her, or doſing her with wine, ſpirits, and ſpices; any violent agitation of mind during labour will alſo have the ſame effect, and in ſome inſtances a very ſpeedy delivery.

Theſe caſes are extremely critical, and the woman will either be paſt hope of relief, or beyond the reach of danger, in a few hours: whatever aſſiſtance therefore can be afforded muſt be adminiſtered without delay; as in every moment that the diſorder continues, the difficulty of cure increaſes.

But the extent of danger is not always proportioned either to the quantity or appearance of the blood which is loſt; ſome habits or conſtitutions will ſupport an immenſe diſcharge, whilſt others are affected by a very inconſiderable exceſs: when the pulſe flutters and ſinks, the extremities grow cold, and frequent faintings occur, the danger is alarming; but when none of theſe ſymptoms attend, no conſequences of a fatal nature need be apprehended.

Where the woman hath been uſually ſubject to theſe floodings after preceding labours, care ſhould be taken to guard againſt them by a compreſs tolerably firm on the belly; her head ſhould be laid low, and ſhe ſhould be kept as cool and quiet as poſſible.

Some recommend ſuch an expoſure to air, in caſes where the flooding is violent, as we cannot altogether approve; ſuch as ſtripping the woman almoſt naked, admitting the cold air from doors and windows to blow on her body, and throwing cold water ſuddenly on the belly and mouth of the pudenda; but we are of opinion, that ſuch experiments can only be juſtified in thoſe deſperate caſes, which do not admit of hope from the uſe of ordinary remedies. In all common circumſtances of this kind, we apprehend that the moſt ſafe, and generally efficacious external applications, are linen cloths, folded ſeveral times double, dipped in vinegar and water mixed in equal proportions, and being wrung rather dry, applied to the belly, loins, thighs, and neighbouring parts; but as the principal virtue conſiſts in the coldneſs of theſe applications, they ought to be very frequently renewed.

Whatever the patient takes in ſhould be cold, and her drinks ſhould be acidulated; nothing heating or ſtimulating ſhould be permitted: the very languor and faintneſs, which appear alarming to thoſe who are unuſed to thoſe caſes, are of ſervice in checking the force of the circulation, and allowing opportunity for ſuch a coagulation of the blood, as may put an immediate ſtop to the violence of the diſcharge.

The following mixture hath been recommended to be taken in the quantity of two table-ſpoonfuls every two hours, or oftener, according to the exigency.

> Take ſimple pennyroyal water, ſimple cinnamon water, and ſyrup of poppies, of each one ounce—of acid elixir of vitriol, half a dram. Mix theſe well, and ſhake the bottle as often as it is uſed.

If the flooding occaſions extreme weakneſs, and it is neceſſary to adminiſter ſome nouriſhment, it ſhould be of ſuch a nature as is leaſt heating; ſuch as hartſhorn jellies ſtiffened by a mixture of iſinglaſs, ſago with a ſmall quantity of Port wine or claret, beef or chicken tea, or the jelly of calves feet; but every thing muſt be taken cold till the ſymptoms abate.

As an ultimate expedient, a mixture of cold vinegar and water is directed to be thrown up the womb, by means of a clyſter pipe and bladder, and repeated till the mouths of the open veſſels are diminiſhed in ſize by the contraction of the womb.

But in all theſe caſes we recommend the calling for proper aſſiſtance without delay; there are even yet means whereby life may poſſibly be preſerved, but they are of too delicate and critical a nature to be practiſed by any unſkilful or unexperienced hands.

Thoſe violent pains which ſucceed delivery, and are commonly termed *after-pains*, are occaſioned by the efforts of Nature to expel clots of blood, which flowing chiefly from thoſe veſſels which are ſituated in that part to which the after-birth adhered, coagulate into clots, and fall in that form upon the orifice of the womb, which being thus ſtimulated, gradually opens, and by a ſpaſmodic motion, reſembling that of a labour-pang, are ejected and carried off; after which the orifice of the womb cloſes immediately, and the woman remains at eaſe, till other clots offering produce the ſame effect; and thus theſe pains continue at intervals, till the grumous or clotted blood is wholly diſcharged.

Theſe pains are never dangerous, though they are in many caſes extremely troubleſome and of conſiderable duration; thoſe who have had many children are moſt ſubject to them, the power of contraction in the womb being impaired by frequent child-bearing: they ſeldom occur in any degree of violence after the birth of the firſt child, nor when proper time hath been given for the ſpontaneous contraction of the womb to ſeparate the after-birth, which is another reaſon againſt haſty proceedings in the labour.

After-pains are ſometimes attended with a fever, nauſea, ſickneſs, and vomiting, and ſeldom diſcontinue wholly, as long as the diſcharge remains of a red colour.

They may be alleviated by promoting the contraction of the womb, which may be conſiderably aſſiſted by warm flannels, either dry or wrung out of an emollient fomentation, or bladders filled with warm water may be applied to the belly.

The patient ſhould alſo drink freely of diluting liquors, ſuch as oatmeal gruel with carraway ſeeds, and tea with a little ſaffron and a bit of orange-peel in it; a table-ſpoonful of oil of ſweet almonds is alſo recommended to be taken frequently in a tea-cupful of the common drink, in which alſo a tea-ſpoonful or two of poppy ſyrup may be now and then mixed, and eſpecially towards the hour of reſt.

If heat or other feveriſh ſymptoms ſhould attend, the following powders are adviſed.

> Take of prepared crab's claws, one ounce—of purified nitre, half an ounce—of ſaffron powdered, a dram. Rub the whole well together in a mortar. Of this powder, from half a dram to two ſcruples may be taken every four or ſix hours, in a tea-cupful of the ordinary drink.

If theſe pains are complicated with colic or wind in the bowels, clyſters may be thrown up, with ſmall quantities of aſafœtida and laudanum; and, if they are accompanied with loweneſs of ſpirits, and other hyſterical complaints, ten or fifteeen drops of liquid laudanum, taken occaſionally in a glaſs of ſimple pennyroyal water, or a cup of tea from the ſame herb, may give relief.

An *inflammation of the womb* is the moſt dreadful diſeaſe to which women are ſubject after child-birth; and, beſides the common cauſes of internal inflammations, may be occaſioned by a tedious or difficult labour, by efforts of violence to deliver the child or the after-birth, by too hot a regimen during the labour, by obſtructions of the lochia or cleanſings, ariſing from cold admitted into the womb or falling on the adjacent exterior parts, or by bruiſes and injuries either careleſsly or accidentally ſuffered in the delivery.

The ſymptoms of this diſorder, are a preceding chillineſs or ſhivering, ſucceeded by intenſe heat, thirſt, a quick, ſmall, and frequently irregular pulſe, and other ſigns of a feveriſh diſpoſition; a ſenſe of fulneſs and weight is felt about the womb, to which part the pain is principally confined, though it ſometimes extends upwards towards the navel, or backwards towards the fundament, and at others through the groin to one or both of the thighs: the womb itſelf is affected with great heat and a ſwelling, and as the patient turns on either ſide, ſhe feels a heavy maſs fall to the ſame ſide with additional pain, which is alſo perceivable in the loins, kidnies, and groin, of the oppoſite ſide. If the diſeaſe is ſeated in that part of the womb which is connected with the bladder, it will occaſion a ſtrangury or difficulty, and ſometimes a ſuppreſſion of urine, or the little which is diſcharged will be thick, fœtid, and ſcalding; a red mark or ſtain extends in a line up to the navel, and turns black in the worſt and moſt dangerous ſtate of the diſeaſe, and a teneſmus or difficulty and pain in going to ſtool occurs, with a ſtiffneſs in the lower extremities, and painful ſenſations in moving them: if this diſorder approaches during the flowing of the *red lochia* or cleanſings, they are either ſenſibly diminiſhed, or ceaſe entirely.

This complaint may be removed by a ſpontaneous return of the lochia, or by gentle, equal, and continued perſpiration; if neither of theſe favourable circumſtances happen, nor any relief offers by a transfer of the inflammation to ſome other part, it terminates either in an abſceſs or mortification, attended with dreadful ſymptoms, ſuch as delirium, *ſubſultus tendinum*, or violent involuntary twitches, and other ſigns of irritation, and in both caſes generally proves fatal.

Indeed too much attention cannot be paid to pains and ſoreneſs of any kind attending child-bed women, and eſpecially ſuch as affect the womb or any part of the belly, coming on ſhortly after delivery; for if the labour has been tedious, or particularly painful, theſe ſymptoms are always alarming, and unleſs relieved by prudent and ſkilful aſſiſtance, will generally prove mortal in a very few days.

The regimen in this diſeaſe muſt be cooling, the food light and mild, conſiſting principally of ſpoon-meats, vegetables, and fruits; the drink ſhould be diluting, freely acidulated, and taken plentifully; the body ſhould be kept open by gentle laxatives, ſuch as lenitive electuary, cream of tartar, and magneſia; and if theſe ſhould prove ineffectual, laxative clyſters may be frequently adminiſtered: all preſſure on the affected part muſt be carefully avoided, in order to which the bladder and bowels ſhould be emptied as often as poſſible of the urine and fæces; the parts ſhould be bathed with flannels wrung out of warm fomentations, and bladders filled with warm water ſhould be frequently applied; but the degree of heat in both ſhould be juſt as great as will excite gentle perſpiration, and by no means ſuch as will bring on profuſe ſweats.

The patient ſhould be kept in bed as ſtill and quiet in body and as undiſturbed in mind as poſſible; and if the treatment now directed ſhould produce the deſired effect, and a mild and equal perſpiration takes place, accompanied by a kindly warmth, and an abatement of the feveriſh ſymptoms as well as of the pain, reaſonable expectations may be formed of the diſperſion of the inflammation and conſequent recovery.

But if, in ſpite of theſe efforts, the pain grows more acute, and is attended with a throbbing; if the ſymptoms of fever rather increaſe than diminiſh; if a ſickneſs at the ſtomach, nauſea, and inclination to vomit, occurs, with watchfulneſs, and ſuch a wandering of the underſtanding as denotes approaching delirium; a ſuppuration or gangrene may be apprehended: in the former caſe, a favourable criſis may ſtill offer in a diſcharge of the matter through the vagina or paſſage from the womb, which may be diſcovered in the appearance of the cloths, and preſages a happy recovery.

When this happens, frequent injections of warm water into the vagina and womb will prevent the excoriation of the parts by the acrimony of the matter; and the Peruvian bark taken in ſubſtance, a light vegetable and milk diet, good air, and moderate exerciſe, will in general compleat the cure.

In ſome inſtances the matter is communicated to the adjacent parts, and an abſceſs forms in the groin, which ſuppurates, and the matter is diſcharged this way; but ulcers of this ſort are difficult and ſlow of cure, and a lameneſs of long continuance is frequently the conſequence.

But a favourable criſis is rather to be hoped than expected; in far the greater number of caſes a mortification enſues, and little hope remains of any other than a fatal event.

The vagina, or paſſage from the womb, is alſo ſubject to inflammations; but as the cauſes and ſymptoms are ſimilar to thoſe of inflammations affecting the womb itſelf, the treatment and method of cure will be in all reſpects the ſame.

The *irregularity of the lochia*, or cleanſing diſcharges, may ariſe either from an exceſſive flow, or a ſuppreſſion of them.

Theſe diſcharges, which follow the birth of the child and the extraction of the after-birth, are, as has been already obſerved, the remaining contents of thoſe veſſels which, during the pregnancy, opened into the cavity of the womb, and chiefly in that part to which the after-birth adhered: until the ſize of theſe veſſels is leſſened by the contraction of the womb, the evacuation will appear to be pure blood, and is then commonly called the *red water*; as the veſſels contract, the diſcharge aſſumes a more pale and watery aſpect, and is termed the *green waters*; and before it ceaſes totally, all the bloody appearance vaniſhes.

The appearance of matter, which this diſcharge takes after ſome days, hath been attributed to a ſlight ſuppuration affecting the internal ſurface of the womb a ſhort time after the delivery, and to the diſſolution or reduction to ſlough of the membranes which line the womb.

The quantity of the bloody lochia depends on the habit and conſtitution of the patient, the greater or leſſer diſtenſion of the womb, and the ſlower or more quick contraction of it after the labour: it may alſo be in a great meaſure affected by the treatment of the woman in delivery, and the degree of proper management exerciſed in extracting the after-birth.

It appears that this evacuation is a neceſſary diſcharge of a quantity of blood, which being prepared for the nouriſhment of the child during the pregnancy, remained unexhauſted at it's birth, and muſt be thrown off to preſerve the health of the mother; and as the milk for the future ſuſtenance of the child is provided from the ſame fund, the blood which was formerly ſeparated for the one purpoſe, will now be converted to milk for the other; and conſequently, where the mother does not ſuckle her child, and the milk is to be repelled, the lochia will be neceſſarily more copious.

Nor is the quantity at all important as to recovery; for, provided no diſagreeable ſymptoms appear, thoſe who have but a trifling diſcharge, regain health and ſtrength as ſpeedily as thoſe whoſe evacuation is much greater.

But, like all other evacuations, an exceſſive diſcharge of the lochia is weakening, and the patient is apt to be affected in future with diſeaſes of the nerves, hypochondria, and general relaxation.

An *immoderate flux* of this kind is attended with weakneſs, loathing of food, a ſlow, weak, and intermitting pulſe, faintings, convulſions, paleneſs of countenance, pains in the ſides and other internal parts, tightneſs of the belly, giddineſs, dimneſs of ſight, and other ſymptoms of debility.

In urgent caſes, ligatures about the wriſts and ancles, and above the knees and elbows, are directed; and the regimen and treatment muſt be nearly ſuch as have been already directed in caſes of flooding. The bark is an admirable remedy, and may be either taken in ſubſtance or decoction, and ten or fifteen drops of the acid elixir of vitriol may be added to each doſe: in ſlight caſes, a tea-cupful of tea, or infuſion of roſes, with the like quantity of the elixir of vitriol, may be taken three or four times a day.

But *a deficiency* or *obſtruction of the lochia*, is a diſeaſe of a nature much more troubleſome, and more dangerous in it's conſequences, than a redundancy of this diſcharge; and unleſs the return of the evacuation can be procured, or Nature makes an effort in ſome other way, the event may be very fatal.

This diſorder is frequently occaſioned by the woman's being taken up too ſoon, or incautiouſly expoſed to the cold; or it may ariſe from an impoveriſhment or defect in the blood, from convulſive ſtrictures of the uterine veſſels, from diarrhœas or other fluxes, from inflammations of the womb, from agitations or paſſions of the mind, or from irregularities in the regimen.

When theſe diſcharges are defective the belly ſwells, and a heavy pain is felt both there and in the loins, and ſometimes, though not always, in one or both groins; a heat and throbbing, or pulſation in the womb, produces reſtleſſneſs and fever, the pulſe grows hard and full, and other feveriſh ſymptoms occur, ſuch as pains in the head and back, a nauſea and ſickneſs at the ſtomach, and ſometimes vomiting and a difficulty of breathing; the face looks fluſhed and fiery, ſhiverings like thoſe of acute fevers come on, which are ſucceeded by intenſe heats, and thoſe by cold ſweats; and as the diſeaſe becomes more dangerous, the heat and pulſation of the womb increaſe, a palſy ſeizes the lower limbs, and ſometimes the patient is attacked by fits of the epilepſy. In ſome inſtances the lochia diminiſh gradually, and in others ſtop at once; and in the latter caſe, the ſudden obſtruction frequently occaſions a delirium, which increaſing, is followed by convulſions and death; or, if the patient eſcapes with life, ſhe loſes her ſenſes, and ends her days in a ſtate of lunacy.

The moſt dangerous period in which this obſtruction can take place, is whilſt the evacuated blood continues to be florid; it is leſs troubleſome when it does not happen till the colour has begun to change, nor is any regard due to the ſmallneſs of the quantity, if no fever, pain, or other ill effects, are occaſioned by the want of this diſcharge.

The immediate objects to be purſued in order to effect the cure are, to calm the mind if the obſtruction has proceeded from paſſion or agitation of the ſpirits, and generally to promote the return of the defective diſcharge; but the means uſed for this end are not to be perſiſted in above two or three days, if they ſhould prove unſucceſsful; after that time it will be proper to wait for the efforts of Nature. If the patient outlives the twentieth day, there is ſaid to be but little danger.

If the pulſe is full and hard, from the ſuppreſſion of the lochia, bleeding may be neceſſary; but if the pulſe ſinks after this operation, it muſt by no means be repeated, but in that caſe a bliſter may be proper.

After bleeding, the patient may drink camomile tea as often as convenient, but not in quantities ſufficient to provoke vomiting; a ſmall quantity of ſaffron may be added to it, and draughts may be adminiſtered of the following compoſition.

Take of ſimple cinnamon water, one ounce and half—of compound powder of contrayerva, one ſcruple—of ſalt of wormwood, ten grains. Make a draught, to be repeated every three, four, or ſix hours, according to circumſtances. A ſmall quantity of the cordial confection, or mithridate, may be diſſolved in this draught if neceſſary, or ten drops of liquid laudanum may be added; and if the heat is exceſſive, a ſcruple of the diuretic ſalt may be ſubſtituted for the ſalt of wormwood.

If the ſuppreſſion of the lochia hath been occaſioned by the hurry and agitation of mind produced by a tedious and painful labour, laxative cooling clyſters will be proper, with gentle anodynes and mild perſpiratives; and theſe medicines will generally ſucceed when the obſtruction hath been the conſequence of a cold.

Grief, anxiety, and deſponding diſtreſs, ſometimes impede theſe evacuations; in thoſe caſes the patient ſhould be kept ſtill in bed, her mind ſhould be ſoothed, all her drinks ſhould be taken warm, and nervous medicines, ſuited to the particular circumſtances, ſhould be adminiſtered, in addition to others moderately cordial.

If the lochia cannot be induced to return, and the patient is ſeized with ſhiverings, there is reaſon to apprehend an abſceſs forming in ſome part of the body, which is in general critical, and will carry off the complaints, if the patient's ſtrength will enable her to ſupport the diſcharge: theſe abſceſſes are uſually in the breaſt, but are ſometimes ſeated in other glandular parts.

Purging is not adviſeable in theſe caſes; but if a diarrhoea ſhould come on ſpontaneouſly, it may be left to nature as long as the ſtrength does not appear to be impaired by it; but if it continues to increaſe, and the patient ſeems to be weakened, opiates ſhould be adminiſtered, both by the mouth and in clyſters; and if the pain is conſiderable, and occaſions reſtleſſneſs, emollient clyſters will be uſeful, as well as the anodynes.

If the ſuppreſſion of the lochia is the conſequence of imprudence in taking the patient up too ſoon, and a delirium ſhould follow, it will either terminate in confirmed madneſs or lunacy, if the cauſe cannot be ſpeedily removed; to this end the patient ſhould be kept in bed, and all evacuations avoided, except perſpiration; every thing that can diſturb her quiet ſhould be carefully guarded againſt: the draught above preſcribed, with the addition of ſpermaceti, may be frequently adminiſtered, emollient clyſters ſhould be injected by way of fomentations, and bladders of warm water ſhould be applied as near as poſſible to the ſeat of the diſorder.

To what has been ſaid on the ſubject of ſuppreſſed or obſtructed lochia, ſhould be added cautions with reſpect to cleanlineſs, an article on which this complaint depends in many inſtances, and which is in all others of great importance, both towards removing it, and the prevention of other diſagreeable conſequences which frequently ariſe from neglect in this particular; ſuch parts as are within reach ſhould be frequently cleanſed with a ſpunge dipped in warm milk and water, and the interior parts ſhould be waſhed with injections of the ſame liquid: by ſuch precautions theſe obſtructions are frequently prevented, as well as inflammations, excoriations, ſores, and other inconveniencies ariſing from the ſtagnation of the putrid lochia about different parts of the pudenda.

When the florid lochia ceaſe, the *flow of the milk* ſupplies the place of that diſcharge; and where the lochia have been evacuated largely, the milk will ſucceed in proportionable quantities.

Nor is this to be conſidered as an evil in the generality of caſes; for if the infant is put to the breaſt in due ſeaſon, and the mother perſeveres in ſuckling it, the flow will ſeldom be found to be productive of diſagreeable conſequences.

Indeed, after a firſt delivery, and in ſome few other inſtances where the child is permitted to ſuck, and in many where this maternal duty is not intended to be performed, the flux of milk to the breaſt is attended with complaints, notwithſtanding the utmoſt precaution.

In theſe caſes, pains, like thoſe which precede the periodical diſcharges of women, are felt about the lower part of the belly, accompanied with feveriſh ſymptoms, more or leſs high according to the patient's habit and conſtitution; and theſe pains are followed by a troubleſome diſtenſion of the breaſts, with a ſenſe of great weight, throbbing, and a ſharp pain; and theſe ſymptoms continue to increaſe in violence for twenty-four or thirty-ſix hours; at the end of which time, if the criſis is favourable, either the milk diſcharges of itſelf, or is carried off by a natural ſweat or a diarrhœa.

The management neceſſary to prevent the milk-fever, or inflammations and other diſeaſes of the breaſt, muſt depend on the circumſtance of the child's being ſuckled or not, different treatment being required in each caſe.

If the infant is permitted to enjoy the proviſion made for it by Nature, it ſhould, as we have already directed, be put to the breaſt about twelve hours after it's birth; but as a ſudden acceſſion of milk would prove equally inconvenient to the child and the mother, ſickening and nauſeating the former, and producing the fever already deſcribed in the latter, endeavours ſhould be uſed to bring it on gradually, by not ſuffering the infant to continue long at a time at the breaſt, nor repeating the attempt often: by this means the quantity of milk invited to the breaſt will in ſome meaſure be proportioned to the conſumption of it; but it is impoſſible to give general rules for management in this particular, regulations will ariſe with greater propriety from obſerving the habit and conſtitution of the mother and child, which muſt direct in theſe circumſtances.

But it ſometimes happens, that the nipples are in ſuch a ſtate as to prevent the mother from giving ſuck, lying flat, or being buried in the breaſts, ſo that nothing leſs than actual force can draw them out ſo far as to enable the child to take hold of them; but this difficulty may in a little time be removed by applying nipple-glaſſes; though ſome recommend the nipple being drawn by a child already uſed to ſuck, or even by a puppy.

If the milk is to be repelled, an abſtemious regimen muſt take place, and the patient ſhould keep her body open by gentle laxatives: ſome adviſe the breaſts to be drawn for a few days, and the milk to be leſſened in this way by degrees; and others are of opinion that if the breaſts are gently anointed with ſweet oil, or if they are ſmeared with oil, by dipping a feather in it and ſpreading it on the breaſts, and they are afterwards covered with flannels or fur, the milk will depart without farther inconvenience. But we apprehend both methods may be practiſed with advantage, and that if the breaſts are firſt gently drawn, and afterwards lubricated with the oil, the milk may be got rid of with leſs inconvenience, than by either the ſuction or the application of oil alone.

But if from accidental cauſes, ſuch as colds or obſtructed perſpiration when the child is ſuffered to ſuck, or from neglect, miſmanagement, handling the breaſt or nipples, or attempts to extract the milk by force when it is not intended to let it be drawn off by the infant, ſigns of fever and diſtenſion ſhould be continued beyond the ſecond day, and the breaſts ſhould then grow harder, and the ſymptoms become more violent, an approaching inflammation may be apprehended, and the utmoſt care and attention will be neceſſary to prevent a dangerous fever, or a tumor and ſuppuration in one or both of the breaſts.

In the firſt ſtages of theſe complaints, a fomentation of an infuſion of camomile flowers is recommended, and ſhould be repeated twice a day at leaſt, or oftener if the breaſts are particularly troubleſome; taking great care in the mean time to keep them warm, and to promote the perſpiration of the parts by covering them with flannels or fur.

The following embrocation is alſo preſcribed, the patient having been firſt bled, and her bowels being properly looſened by manna and ſalts, ſenna, cream of tartar, or magneſia.

Take of the volatile ſpirit of ſal ammoniac, half an ounce—of camphorated ſpirit of wine, one ounce and half—of ſweet oil, half an ounce. Shake theſe well together, and having dipped a linen rag in the mixture, lay it over the breaſts, and moiſten it as often as it becomes dry.

The nipples may alſo be frequently waſhed with warm milk and water, to promote the flowing of the milk, which from the ſtructure of the breaſts, and the winding conſtruction of thoſe milk-veſſels or tubes which terminate in the different perforations of the nipple, forming thoſe diſtinct apertures from whence the milk is emitted in ſo many ſtreams, cannot paſs off involuntarily, with the ſame eaſe as from thoſe animals whoſe veſſels are larger and in a more ſtraight direction.

If, notwithſtanding the before mentioned applications, the inflammation gains ground, the hardneſs increaſes, and the pain is augmented and accompanied with throbbing and feveriſh ſymptoms, ſuch poultices may be applied as will either anſwer the purpoſes of diſperſion or ſuppuration: for this purpoſe the common one of white bread, milk, and oil, is equal to moſt others, though ſome rather recommend it's being compoſed of linſeed flour wetted with warm water; nor ſhould this application be confined to the mere ſeat of the pain, but the poultice ſhould be ſpread large enough to cover the whole breaſt.

If a ſuppuration is unavoidable, ſupport the breaſt with a handkerchief ſuſpended from the neck, and promote the ripening, by renewing the poultices three or four times a day, never ſuffering it to remain on long enough to get cold, hard, or diſagreeable.

It has been the practice to make openings in theſe abſceſſes during the ſtate of inflammation, from an idea that the pain might be leſſened by ſuch an operation, but this is an expedient of a moſt pernicious nature; for, after theſe premature diſcharges, new collections of matter will be made, and ſo from time to time till the whole breaſt is deſtroyed, or a ſcirrhus formed by repeated inflammations, which ſeldom fails to terminate in ſinuous ulcers, if not in a cancer.

If a knife is to be uſed, which we confeſs we think in moſt caſes much better avoided, the inciſion ſhould be made in a ſemicircular form, both to avoid wounding the nipple itſelf, and the little circle which ſurrounds it; by making the wound in this form, both the beauty and future uſefulneſs of the part may be preſerved.

The ulcer may be dreſſed with yellow baſilicon ſpread on pledgets of lint, or with ſpermaceti ointment, over which dreſſings the poultice ſhould be continued while either the inflammation, hardneſs, or pain, remains.

Theſe abſceſſes are more or leſs troubleſome and obſtinate, as they are ſeated deeper or more ſuperficially; if they lie low they proceed more ſlowly to ſuppuration, are very painful, and the fever which attends them is conſiderable; and unleſs theſe abſceſſes are very ſkilfully treated, they impair and weaken the conſtitution, and induce a general bad habit; but when they are ſituated near the ſurface they ripen, break, and heal ſpeedily, and are ſometimes attended with ſo little inconvenience, that the woman continues to ſuckle her child, as well during their formation, as while the wounds occaſioned by them are healing.

Among other complaints, to which childbed women are ſubject, ſore nipples, though apparently of no great conſequence, are frequently ſo extremely troubleſome, as to put the mother to great torture, or to compel her to relinquiſh ſuckling her child.

The nipples may either be affected by excoriations of the ſkin, and conſequent rawneſs, or by chaps or fiſſures occaſioned by ulcerations.

When the nipples are diſeaſed in either of theſe ways, the continual ſuction of the child, and the acrimony of the milk, render it a difficult matter to heal them, or to reſcue the woman from the pain and diſtreſs of an indiſpoſition, which is always conſidered as of a very trifling nature.

Though women are principally ſubject to ſore nipples at the firſt or ſecond lying-in, and they are generally ſo hardened by frequent ſuckling, that they eſcape this diſagreeable complaint, yet inſtances are not uncommon where it attends every childbirth, and where the mother looks forward with anxiety to the pain ſhe is to endure from it.

Variety of remedies have been preſcribed for this complaint, but none of them promiſe much relief, without ſome management with reſpect to the frequency of the child's ſucking; for no ſooner does the excoriation begin to ſkin over, or the chaps to heal, than the eagerneſs of the infant to draw it's favourite ſupport undoes the effect of the beſt concerted preſcription; if it can be ſo contrived that one nipple may be favoured at a time, both may be healed; but even this is attended with ſome difficulty, on account of the neceſſity of drawing off the milk, leſt the increaſe of it may produce inconvenience to the breaſt.

On the firſt approach of ſoreneſs, the nipples ſhould be frequently waſhed with a little brandy and water, the quantity of each in the mixture being proportioned to the degree of ſmarting which is occaſioned by the uſe of it: ſome adviſe alum water, Velno's vegetable mineral water properly diluted, or Hungary water; ſome recommend japan earth diſſolved in water, and others ſprinkling the nipple with gum Arabic powdered; and they ſhould be covered either with nipple-glaſſes or pieces of thin lead, perforated or fitted to the ſhape, the cooling quality of which latter may be ſerviceable in allaying the inflammation, at the ſame time that they ſerve to defend theſe tender parts from being rubbed by the linen or other garments; a ſolution of ſugar of lead is alſo ſometimes of uſe, which may be made as follows.

> Take of ſugar of lead, fifteen grains—of roſe water, half a pint—of diſtilled vinegar, half an ounce. When the lead is diſſolved, ſhake it well, let it ſubſide, and filter it through paper; the ſtrength may either be increaſed or diminiſhed, by adding to or leſſening the quantity of the ſugar of lead.

To make alum water.

> Take of powdered alum, half a dram—of boiling water, half a pint. When the alum is diſſolved, ſhake the mixture; and filter it through paper when it is cold and has perfectly ſubſided.

But when the nipples are ſo ulcerated that the fiſſures or chaps are deep, occaſioning intenſe pain on every attempt of the child to ſuck, the difficulty of cure is increaſed, none of the foregoing remedies will prove effectual, and it is ſometimes abſolutely neceſſary to wean the child, to prevent the nipples from being totally deſtroyed.

Yet, even in theſe aggravated caſes, means may be tried to avoid the neceſſity of this diſagreeable expedient; the nipples may be frequently waſhed with warm milk and water, and particularly juſt before the child is to take them, which will ſomewhat abate the ſenſibility of the part, and render the pain more endurable; or the following ſoftening liniment may be gently ſtruck on the parts affected with a feather.

> Take ſpermaceti and ſweet oil, of each half an ounce—of white wax, two drams. Melt the whole together, ſtirring it till it is cold.

Or doſſils of lint may be dipped in this liniment, and laid over the chaps, and the whole covered with a pledget of fine flax ſpread with it.

But we have known the following application ſucceed, when every other attempt to give relief hath proved fruitleſs.

> Take an ounce of quince ſeeds; boil them in half a pint of water till it becomes a thick jelly or mucilage. Spread pledgets of lint with this jelly, and apply to the different chaps, and cover the whole nipple with a finged linen rag dipped in it.

Sore nipples may ſometimes be prevented

by proper precautions before the birth of the child, and to this end they may be frequently bathed with brandy, or the alum water or ſolution of lead already mentioned; but for this purpoſe an equal proportion of white vitriol ſhould be added to the former, and the quantity of ſugar of lead in the latter ſhould be doubled.

Pimples round the nipple are frequently occaſioned by the thruſh in the child, and this ſhould be attended to the moment ſuch a ſymptom appears.

The *fevers* to which child-bed women are more particularly ſubject, are *milk fevers*, *milliary fevers*, and thoſe which are called *puerpural* or *child-bed fevers*.

Of *milk fevers* we have already treated under inflammations of the breaſts, and *milliary fevers* have been deſcribed, and proper directions for treatment and cure given, among the other claſſes of fevers. The *puerpural fever* is the moſt fatal which attends women in this ſituation, and deſerves the moſt particular attention.

The *puerpural fever* generally comes on about the third day after delivery, but ſometimes, though not often, earlier, and very rarely not till the fifth or ſixth day.

The irritable ſtate of the womb after a pregnancy and labour extends itſelf throughout the whole frame, and hence exceſs of heat or expoſure to cold, or any other circumſtance which can excite a fever, may be the cauſe of that of which we now ſpeak; it may alſo be occaſioned by the ſudden emptying of the womb when the membranes were full of water, and the blood ruſhing into theſe emptied parts with too much violence to be regularly returned may excite inflammation: this fever may alſo be produced by coagulated blood lodged in the womb after delivery becoming putrid by the acceſs of air, by obſtructions of the lochia, by a putrid air, by the coming of the milk, by the abſorption of ſour and acrid milk, or inflammations in the breaſt ariſing from that cauſe, and by great coſtiveneſs and retenſion of the excrements.

The approach of this fever is denoted by heat, thirſt, and a quick pulſe: if the womb is inflamed by the abſorption of putrid blood, the lochia will be obſtructed or diminiſhed; and in the latter caſe the diſcharge comes away in ſmall lumps, and in this ſituation matters remain for three or four days.

At length the fever grows high, and it's increaſe is preceded by univerſal ſhiverings, which are followed by an additional quickneſs of the pulſe, which alſo becomes low and weak; the patient complains of intenſe thirſt, violent pains in the head, want of reſt, oppreſſion of the breaſt, and lowneſs of ſpirits, occaſioning frequent and deep ſighs; theſe ſymptoms are ſucceeded by general weakneſs, reſtleſsneſs, a wildneſs approaching to madneſs, or a deſpair inclining to melancholy, in the countenance, inflammations in the eyes and ſtiffneſs about the lids, with a pain in the ſide, a difficulty of breathing, and a dryneſs of the ſkin, and the tongue is of a gloſſy brown colour, dry, and parched; in the advanced ſtate of the fever, if a hand is laid on the patient's ſkin, and continued there ſome time, it communicates to it the ſame kind of pricking ſenſation as is felt after dipping the fingers in warm putrid blood: from the urine no judgment can be formed, becauſe it is conſtantly mixed with black putrid blood draining through the vagina. As the fever increaſes a diarrhœa comes on, and the ſtools are black, liquid, and extremely offenſive; the tongue turns to a reddiſh colour, and pimples, or a kind of thruſh, appear in the mouth; the breaſts are looſe and flabby, and upon their being drawn, blood is frequently diſcharged inſtead of milk; in ſome inſtances the belly ſwells during the courſe of the diſeaſe, but it never fails to be affected with extreme ſoreneſs, and a delirium is uſual from the time the fever begins to be violent.

When an inflammation of the womb is the immediate cauſe, the ſymptoms are ſomewhat various: pains reſembling after-pains ſhoot from the loins and belly into the groins and thighs, and continue with few intermiſſions; the fundament and neck of the bladder become extremely tender, the tongue is white but moiſt, the belly bound, and the lochia are either wholly ſuppreſſed, or the diſcharge is of a brown colour reſembling coffee-grounds.

If this fever is produced from inflammation of the bowels, or other abdominal inteſtines, the belly is firſt affected with a ſenſe of weight and dull pain, and the patient is commonly coſtive, but the pulſe is not ſo quick as in other caſes, nor the heat ſo conſiderable; but as the fever grows high a diarrhœa comes on, and the ſymptoms reſemble thoſe of fatal bruiſes in the belly.

If this fever is occaſioned by putrid air or unwholeſome effluvia, the diſorder may be diſtinguiſhed from an original diſeaſe of the womb, by the lochia being at firſt regular and uninterrupted, and the after-pains, if it attacks during the continuance of them, being unaccompanied with inflammatory ſymptoms.

An extraordinary quickneſs of the pulſe, occaſioned by the extreme irritability of the patient, alſo marks puerpural fevers; and it may be obſerved, that unleſs this, together with other ſymptoms of fever, attend, no conſiderable degree of danger need be apprehended from the ſoreneſs of the belly, or the flaccid appearance of the breaſts.

In our endeavours to remove this diſorder, the ſtate of the patient during delivery muſt direct the firſt ſteps: if ſhe do not loſe much blood at the time, and the pulſe is hard and quick, it may be neceſſary to take off a ſmall quantity; on the contrary, if the evacuation at that time was copious, the operation of bleeding muſt be omitted, and emollient clyſters of milk and water with ſweet oil ſhould be adminiſtered every three or four hours, or at greater intervals, according to circumſtances, and a dram of Glauber's ſalts may be given after each clyſter, or leſs frequently, according to the effect it produces; if the ſalt paſſes through the bowels too quickly, a few drops of liquid laudanum may be added: great care muſt be taken in the injection of the clyſters, on account of the tenderneſs of the parts.

If the ſtomach will not retain the ſalts, a grain or two of calomel may be given with one third of a grain of the emetic tartar, and after a ſtool or two has been obtained the following draughts.

Take of ſimple mint water, one ounce and half—of the diuretic ſalts, half a dram—of antimonial wine, thirty drops. Make a draught, to be taken every fourth or fifth hour. One fourth of a grain of the emetic tartar may be ſubſtituted for the antimonial wine; and if theſe draughts paſs away too freely by ſtool, two or three drops of liquid laudanum may be added to each doſe.

If theſe draughts are productive of perſpiration they ſhould be continued; but if they fail of having this effect, and the bowels ſeem to have been ſufficiently emptied, the following bolus and draught may be given every four or five hours.

Take of crude ſal ammoniac, from fifteen grains to a ſcruple, according to circumſtances—ſpermaceti, and compound powder of crabs claws, of each ten grains—of conſerve of wood ſorrel, enough to make a bolus.

Take Mindenerus's ſpirit, and ſimple mint water, of each one ounce. Make a draught.

Some recommend ſaline draughts of the uſual compoſition, with the addition of a few drops of liquid laudanum, or a ſpoonful of poppy ſyrup, if the ſtools are too frequent.

The patient's food ſhould be light and low, and the drinks diluting: water with a toaſt is perhaps the beſt that can be given; but if the diſeaſe is of long continuance, and the patient is conſiderably weakened, ſhe will require to be ſtrengthened with white wine whey, negus, and ſome more nouriſhing food.

If the frequency of the ſtools ſhould threaten to exhauſt the patient too much, a clyſter with ſtarch, and from twenty to forty drops of liquid laudanum, may be injected occaſionally, and the drink ſhould be in that caſe water in which gum Arabic has been diſſolved, in the proportion of half an ounce to a pint.

But when the looſeneſs degenerates to a confirmed diarrhœa, the diſorder has paſſed the inflammatory ſtage, and approaches to a putrid ſtate, and different treatment is required.

The diſcharge is not to be immediately or ſuddenly ſtopped, but it will be proper to aſſiſt Nature, by rendering the matter which irritates the inteſtines leſs active, by correcting the ſtate of the fluids univerſally, by leſſening the irritability of the habit, and by giving ſuch antiputreſcent diuretics as may defend the nerves of the firſt paſſages from irritation, and carry off whatever putrid matter falls upon the inteſtines, without it's operating as a violent purge.

To anſwer theſe purpoſes, the following medicines are preſcribed.

Take columbo root, and rhubarb, both powdered, of each ten grains. Make a powder, to be taken every three or four hours.

Where the pulſe is full, and the heat conſiderable—

Take of camomile flowers powdered, twelve grains—of ſtarch, ten grains. Make a powder, to be taken every four or five hours, or oftener, according to the urgency of the ſymptoms, waſhing each doſe down with a tea-cupful of the water in which the gum Arabic hath been diſſolved, adding to it from fifteen to twenty-five drops of the ſweet ſpirit of nitre.

The bark is however the remedy principally to be relied on in this ſtage of the diſorder, and may be given in ſubſtance or the decoction, and in ſuch quantities as the patient's ſtomach will bear; but the adminiſtration of this medicine ought not to commence till the pulſe ſinks and the feveriſh heat is abated: at leaſt, if the bark is given during the exiſtence of theſe ſymptoms, ten drops of the ſweet ſpirit of nitre ſhould be added to each doſe, and two or three drops of liquid laudanum; but if the diarrhœa goes off and leaves the fever, it will be proper to ſubſtitute a few grains of rhubarb for the laudanum.

If the pulſe ſhould ſink too low, and a nervous oppreſſion follows, an ounce of the camphorated julep may be given every three or four hours, to revive and ſupport the patient's ſpirits; and her drinks may be acidulated with the ſpirit of ſea ſalt.

This diſorder is ſaid to be particularly infectious; and, when perſons in the ſame condition are much together, as in lying-in hoſpitals, and other public receptacles of women for delivery, is frequently epidemic, and extremely fatal.

As it commonly ariſes from injudicious management in and after labours, and particularly from colds caught in conſequence of keeping patients too warm at firſt, and expoſing them to the air too ſoon after, precautions in theſe particulars will be the moſt likely means of avoiding or preventing this dangerous and troubleſome diſeaſe.

Having now given general cautions and directions for the treatment and management of women, from the firſt moments of perceivable pregnancy to the laſt occurrence of danger after child-birth, we ſhall add a few plain Receipts for ſuch Food and Liquors as are proper for patients after delivery; for though the nurſes of the metropolis, and many others who devote themſelves wholly to this employment, are generally well acquainted with theſe matters, yet this is not altogether the caſe in the country, nor does a ſkilful and experienced nurſe always fall to the lot of women whoſe ſituations enable them to ſeek for the beſt aſſiſtance of this ſort.

To make common caudle.

Take of water gruel boiled ſmooth and to a proper conſiſtence, and mild ale, of each a quart. Boil it ten minutes together, ſtirring it continually. If neceſſary ſtrain it off, and add nutmeg and ſugar to the taſte. Eat a bit of toaſted bread with it.

Wine caudle.

To a pint of water gruel, boiled rather thick and ſtrained, add a little cinnamon, a clove or two, and a bit of freſh lemon-peel. Let it boil a few minutes, and add a large glaſs of white wine, and nutmeg and ſugar. If the patient's ſtools are very frequent, Port wine may be added inſtead of white wine.

To make panada.

Boil two ounces of ſtale bread in a pint and half of water, till the bread falls abroad and the mixture becomes ſmooth; it muſt not be ſtirred whilſt it boils. Eat it with nutmeg, ſugar, and a little white wine.

To boil ſago.

Take two ounces of ſago, and a full pint of water; boil it over a ſlow fire, ſtirring it conſtantly till it is thick. Add grated nutmeg or powdered cinnamon, a ſpoonful or two of white wine or Port, according to the ſtate of the patient's body, and ſugar to the taſte.

Salop.

Take of the powder of ſalop, a table-ſpoonful—of water, a pint. Mix the powder in a ſmall quantity of the water, and then add the the reſt. Set the mixture over a clear fire, and ſtir it till it thickens to a jelly. Add nutmeg, wine, and ſugar.

To make egg caudle.

Beat the yolks of two eggs well with a little ſugar; then ſet a ſaucepan over the fire with a pint of new milk, and having mixed a ſpoonful of flour with three or four ſpoonfuls of milk, and added to it the egg and ſugar, throw the whole into the milk as ſoon as it boils: ſtir it conſtantly till it boils up again, then add two or three ſpoonfuls of white wine; let it boil a third time for a minute, and add a little grated nutmeg.

To make chicken, beef, mutton, or veal tea.

Take of lean meat of either kind, nicely ſeparated from ſkin and fat, half a pound—of water, a quart. Skim it after it begins to boil as long as any froth ariſes, then add a little mace; let it boil a quarter of an hour longer, pour it into a baſon, and when cold take off any fat that may have riſen to the ſurface.

To make chicken broth.

Take half a pound of the fleſh of a chicken, without ſkin and ſtripped of the fat; cut it into very ſmall pieces, and boil it an hour in a quart of water, taking off the ſcum carefully as it riſes; then add a little mace, and an unburnt cruſt of bread; let it boil a quarter of an hour longer, then pour it off carefully, and ſet it by for uſe. Neither broths or teas of animal fleſh ſhould be ſalted till they have nearly done boiling.

To make mutton broth.

Take one pound and quarter of the lean fleſh of a loin of mutton, and two quarts of water; let it boil a few minutes, taking off the ſcum very carefully; then add a few grains of whole pepper, and boil it till the meat is quite tender; then take out the meat, and add an ounce of rice or of pearl barley, and boil it till it is ſoft: thyme, parſley, or a ſmall quantity of onion, may be added, if agreeable.

To make a ſoup without fleſh.

Take half a pint of green or dry peas, according to the ſeaſon; boil them in three quarts of water, adding a bunch of pot-herbs, and half a dozen onions. As ſoon as the whole is boiled perfectly tender, beat the vegetables with a ſpoon, and force the pulp with the liquor through a ſieve; ſet it on the fire, and when it boils add a lettuce, a turnip cut ſmall, and cellery. Seaſon with pepper and ſalt, and eat with toaſted bread.

Soup maigre.

Take turnips, carrots, cellery, lettuce, endive, the inner part of a cabbage, two or three potatoes ſliced, half a dozen onions, and a handful of green or dry peas. Cover theſe vegetables with water, and boil them in an earthen pipkin till they are perfectly tender, then beat them; ſtrain the whole through a ſieve, and add ſome freſh herbs cut ſmall, a little pepper and ſalt, and a cruſt of bread. Boil till the herbs are moderately tender.

A bread pudding.

Boil a pint of milk with a piece of freſh lemon-peel; pour it boiling hot over the crumb of a two-penny loaf; cover it up cloſe, and let it ſtand till it is cold; beat the yolks of three eggs, with a little ſugar, and a ſpoonful of roſe water, and mix it with the bread, working the whole well together, and adding a little powdered cinnamon or grated nutmeg, according to taſte; tie the pudding in a cloth, boil it an hour, and make a ſauce with white wine, melted butter, and ſugar. A pudding may be made of a French roll without eggs, but it muſt not be boiled above half the time allowed for the former.

An oatmeal pudding.

Stir half a pound of oatmeal in a quart of water, till the floury part is well mixed with it; ſtrain it off through a fine ſieve, ſet the liquor over the fire, with a bit of cinnamon and a piece of lemon-peel, and boil it, ſtirring it the whole time till it acquires a certain degree of thickneſs, equal to that of good jelly: add a ſpoonful or two of orange flower water, and the ſame quantity of white wine, with ſugar to the palate. Bake it, either with or without a cruſt round the edge, and grate ſugar over it when it is ready.

A common rice pudding.

Boil four ounces of rice in a little water till it begins to ſwell; then take it off, pour away the water, and let the rice ſtand till it is cold; put it in a baking-pan, and add to it a quart of milk, a little powdered cinnamon, and ſugar to the taſte. Butter a diſh, and bake it.

Another bread pudding without eggs.

Pour three pints of milk, boiling hot, over the ſoft of a two-penny loaf; cover it cloſe, and when it is cold grate ſome of the yellow rind of a Seville orange, and add it with ſugar and powdered cinnamon to a glaſs of white wine and orange flower water, mixed in equal proportions; beat the whole together with the bread till it is tolerably ſmooth. This pudding may either be baked or boiled; if the latter, it muſt be put over the fire in a pan and ſtirred till it is thick, and then boiled in a cloth, and eat with lemon-juice, ſugar, white wine, and nutmeg grated, if agreeable.

A batter pudding.

Take four ſpoonfuls of flour, a full pint of milk, the yolks of four eggs, with the white of one; ſeaſon with nutmeg or ginger, and a little ſalt: beat the whole well together. Boil the pudding three quarters of an hour, and eat it with the ſame ſauce as the laſt.

To make hartſhorn jelly

Take a pound of the ſhavings of hartſhorn, and three quarts of water; boil in a cloſe veſſel till it is nearly half conſumed, and then add half an ounce of iſinglaſs; boil again till the liquor is reduced to a quart; ſtrain off the liquor, and add to it half a pound of fine ſugar, half a pint of white wine, and lemon or orange juice to the taſte. Boil the whole liquor together till on trial it appears to jelly well, and then paſs it through a flannel bag.

Calves feet jelly.

Boil three calves feet ſlowly in ſix quarts of water till it is reduced to three pints; ſkim off the fat during the boiling, ſtrain, and let it ſtand till it is cold, then take off the top and bottom part of the jelly, ſo as to free it perfectly from fat and ſediment; melt the clear jelly, and add to it white ſugar, and lemon or orange-juice, as directed above, and a bit of the yellow rind of orange or lemon; let it boil up, and then run it through the jelly bag. In order to make it tranſparent, the white of four or ſix eggs may be beaten up with a whiſk, and added to the mixture during the laſt boiling.

To make barley water.

Take ſix ounces of pearl barley, and waſh it carefully in hot water; after which let it ſtand till it is cold; then add three quarts of boiling water to the barley, ſet it on the fire, and let it boil gently till half the quantity of water is conſumed. Strain it for uſe.

Rice gruel.

Take of ground rice, three ounces—of water, two quarts—of cinnamon bruiſed, two drams. Boil it three quarters of an hour, and ſtrain it. It may be acidulated with lemon or orange-juice, and ſweetened to the palate.

Oatmeal gruel.

Mix three table-ſpoonfuls of oatmeal in a ſmall quantity of water, and add more water gradually to the quantity of a quart, ſtirring it that it may not gather in lumps; boil it a quarter of an hour, ſtirring it the whole time. Strain it off, and it will be ready for uſe, either with ſugar and wine, or ſalt, according to circumſtances and the patient's taſte.

To make imperial water.

Take of cream of tartar, two drams—of lemon or orange-peel, pared very thin, about a dram—and two ounces of fine ſugar. Pour on theſe ingredients two quarts of boiling water, and cover cloſe. When it is cold pour it off very carefully. It ought not to be kept longer than forty-eight hours.

White wine whey.

Take two thirds milk, and one third water; ſet it over the fire in a very clean veſſel; as ſoon as it boils up, throw in the quantity of an eighth of the mixture, or rather more, of white wine; let it juſt boil again, ſkim off the froth, ſeparate the curd with a ſpoon, and pour the clear whey off carefully. If it is required to be perfectly fine, it may be rendered ſo by the addition of the white of an egg, but in that caſe it muſt be ſtrained.

Cream of tartar whey.

Set a quart of milk over the fire; then diſſolve a dram of cream of tartar in a jill of boiling water. As ſoon as the milk boils up throw in the cream of tartar water; let it boil a moment, ſkim it, and ſeparate the curd.

To make lemonade.

Take two drams of freſh lemon-peel pared very thin—of lemon-juice, two ounces, if the lemons are freſh; or two ounces and a half, if they have been long kept—of fine ſugar, a quarter of a pound. Pour three pints of boiling water on the ingredients, cover it cloſe in a jug or other earthen veſſel, and decant it off fine when it is cold.

A liquor of the ſame kind may be made with juice and rind of oranges; but the proportion of ſugar may be ſomewhat ſmaller.

Infuſions of herbs, for diluting drinks, may generally be made in the proportion of a handful of the green herb, or half as much more of the dry, to a quart of water. Theſe infuſions ſhould not be ſuffered to remain on the herbs above ten minutes, and it is always adviſeable to make a ſmall quantity at a time, and to have it freſh as often as it is wanted. If the herbs are on long ſtalks, or the leaves large, it may be neceſſary to cut them up before the water is poured on them. Where thoſe infuſions are of a diſagreeable flavour, it may in general be remedied by adding a ſmall piece of freſh lemon or orange rind.

No general directions can be given for making *decoctions*; but if they are of roots, they ſhould be ſliced or well bruiſed: and it may be obſerved, that in moſt caſes the length of time during which they are commonly directed to boil is wholly unneceſſary, the virtues of moſt roots and woods being extracted in twenty minutes, or half an hour, and of ſome in a much ſhorter time.

BOOK VII.

Of the Diſeaſes peculiar to Seamen; and thoſe of particular Climates.

CHAP. I.

Of the Sea Scurvy.

THOUGH the diſtinction of *land* and *ſea ſcurvy* hath been uſually made, yet perhaps no ſufficient reaſons can be offered for fixing either of thoſe denominations; certain it is, that long voyages at ſea have been generally productive of this diſorder in it's moſt aggravated ſtate; but it is equally certain that garriſons and armies, in particular ſituations, and under peculiar circumſtances, have been alike ſubject to it's ravages, and that the ſymptoms in the latter caſes have in ſome inſtances been exactly ſimilar to thoſe which have appeared in the former.

Nor does the general idea, that the prevalence of this diſorder at ſea may be attributed to the uſe of ſalt meats, appear to be well founded; modern inſtances have occurred where whole ſhips crews have ſubſiſted for two years together on proviſions ſo hardened by ſalt, that the very taſte of the meat hath been loſt, and yet no ſcurvy has made it's appearance among them; and others, equally well atteſted, of it's raging with violence even in whole ſquadrons, when they have only been debarred from freſh proviſions during a courſe of a few weeks: and the Tartars, who deal leſs in ſalt than any nation in Europe, are ſo ſubject to this diſeaſe, that it ſweeps away the inhabitants of villages and towns, and threatens to depopulate the country.

If we may venture to offer an opinion on a ſubject which has been ſo copiouſly and learnedly diſcuſſed, we ſhould acknowledge ourſelves ſatisfied that it proceeds from a concurrence of cauſes, and that improper, groſs, and corrupt food, of any kind, moiſt and damp air, accompanied either with cold or heat, and impure putrid water, are conjointly productive of the diſorder which is called the *ſea ſcurvy*.

The appearance, progreſs, and effects of this diſeaſe, have been ſo accurately and ably deſcribed by the ingenious editor of Lord Anſon's Voyage round the World, that we ſhall be enabled from thence to give a more faithful and extenſive account of the various ſymptoms of the ſea ſcurvy than can be collected from all the beſt writers on this important ſubject.

Moſt of our readers are acquainted with the difficulties which occured in the early part of a voyage, undertaken at an improper ſeaſon of the year, with ſhips unprovided for the exigencies of ſo deſperate a ſervice, inſufficiently manned with raw and unſeaſoned mariners, and reinforced by a regiment of invalids, collected from hoſpitals and garriſons where they had apprehended themſelves laid up for their lives, after ſpending the terms of their manhoods, and ſpilling their beſt blood, in a ſeries of hard ſervices and ſevere conflicts.

Thus equipped and manned, this ſquadron purſued it's voyage through tempeſts and ſeas, which baffled the efforts of an enemy's fleet that ſailed about the ſame time to oppoſe them; and, after having ſurmounted difficulties, and eſcaped dangers, which ſeemed to oppoſe their attempt with more than human force, they puſhed through the Straits of Le Maire into the great Southern Ocean.

But by the latter end of the month of April, being ſoon after the time that this paſſage was effected, the ſcurvy began to make it's appearance in this devoted ſquadron; and the long continuance at ſea, the fatigue, and the various diſappointments they had met with, had occaſioned it's ſpreading to ſuch a degree, that there were but few on board who were not in ſome degree affected with it: in the month laſt mentioned, not leſs than forty-three died of it on board a ſingle ſhip, the Centurion. It was then apprehended that the diſorder had riſen to an extraordinary height, and hopes were entertained by theſe voyagers, that as they advanced to the northward it would abate of it's malignity; but theſe were vain expectations: in the following month the number of dead were almoſt doubled, and as they did not reach any land till the middle of June, the mortality continued to increaſe; ſo that after the loſs of two or three hundred men, they could at laſt only muſter ſix common ſeamen on a watch capable of duty.

After remarking that this diſorder, ſo frequently attending all long voyages, and ſo peculiarly deſtructive in that which he is deſcribing, is the moſt ſingular and unaccountable of any that affects the human body, this ingenious Journaliſt obſerves, that it's ſymptoms are inconſtant and innumerable, and it's progreſs and effects extremely irregular; for ſcarce any two perſons have the ſame complaints, and where ſome conformity hath been found in the ſymptoms, the order of it's appearance hath differed totally.

Yet though it frequently aſſumes the form of other diſeaſes, and therefore is undeſcribable by any concluſive and infallible criterion, there are ſome ſymptoms more general than the reſt, and which, as they occur oftener, deſerve a more particular enumeration. Theſe common appearances are, large diſcoloured ſpots diſperſed over the whole ſurface of the body, ſwelled legs, putrid gums, and, above all, an extraordinary laſſitude of the whole body, eſpecially after any exerciſe, however inconſiderable; and this laſſitude at length degenerates into a proneneſs to ſwoon on the leaſt exertion of ſtrength, or even the ſmalleſt motion. This diſeaſe is likewiſe uſually attended with a ſtrange dejection of ſpirits, and with ſhiverings, tremblings, and a diſpoſition to be ſeized with the moſt dreadful terrors on the ſlighteſt incident: and in the voyage from whence this deſcription is extracted, it was remarkable in all the reiterated experience of this malady, that whatever diſcouraged the ſhips crews, or in any way damped their hopes, never failed to add new vigour to the diſtemper, for it uſually deſtroyed thoſe who were in the laſt ſtages of it, and confined thoſe to their hammocks who were before capable of doing ſome kind of duty; ſo that it ſeemed as if alacrity of mind and ſanguine hopes were no contemptible preſervatives from it's fatal malignity.

But it is not eaſy, ſays that excellent writer, to compleat the long roll of the various concomitants of this diſeaſe, for it often produced putrid fevers, pleuriſies, the jaundice, and violent rheumatic pains; ſometimes it occaſioned an obſtinate coſtiveneſs, attended with a difficulty of breathing, and this was eſteemed the moſt deadly of all the ſcorbutic ſymptoms; at other times the whole body, but more eſpecially the legs, were ſubject to ulcers of the worſt kind, attended with rotten bones, and ſuch a luxuriancy of fungous fleſh as yielded to no remedy.

But a moſt extraordinary circumſtance occurred in the progreſs of this diſeaſe; the ſcars of wounds which had been for many years healed, were forced open again by the virulence of the diſorder; and in one moſt remarkable inſtance, an invalid, who had been wounded above fifty years before at the battle of the Boyne, and whoſe wounds having been ſoon healed, he had continued in good health till the preſent voyage; yet being attacked by the ſcurvy, his wounds, in the progreſs of the diſeaſe, broke out afreſh, and appeared as if they had never been healed; and what is ſtill more aſtoniſhing, the callus of a broken bone, which had been compleatly formed for a long time, was found to be diſſolved by this diſeaſe, and the fracture ſeemed as if it had never been conſolidated: indeed, the effects of this diſorder ſeemed to be in a variety of inſtances wonderful; many of the crew, though confined to their hammocks, appeared to poſſeſs no inconſiderable ſhare of health, for they eat and drank heartily, were chearful, and talked with apparent vigour and in a loud tone of voice; yet, upon their being ſubjected to the ſmalleſt motion, though it was only from one part of the ſhip to the other, and in their hammocks, they in ſome inſtances expired immediately; and others, who confided in their ſeeming ſtrength, and reſolved to get out of their hammocks, died before they could well reach the deck; nor was it an uncommon caſe for thoſe who could do ſome kind of duty, to drop down dead in an inſtant on an extraordinary exertion, many of the mariners periſhing in this way on the voyage.

Upon the arrival of the ſquadron at the iſland of Juan Fernandes, one hundred and ſixty-ſeven ſick perſons were put on ſhore from the Centurion only, and a dozen at leaſt died in the boats as ſoon as they were expoſed to the freſh air. Nor did the mortality ceaſe with their arriving at land; great numbers died after they were brought on ſhore, and thoſe who ſurvived recovered by very ſlow and almoſt inſenſible degrees, ſo far as to leave their tents and crawl about in the air; but as ſoon as they had acquired ſtrength enough to accompliſh this, a general reſtoration followed very ſpeedily.

Yet the Glouceſter, another ſhip of the ſquadron, though ſhe had ſuffered a ſtill heavier loſs of men, and had actually buried near three fourths of her crew, and had not eighty on the ſick liſt when they were brought aſhore, had much better ſucceſs in the recovery of the few that remained, ſcarce any of them dying after they reached the land; a difference which the editor of this voyage very rationally attributes to the freſh proviſions and vegetables, which were ſent on board the ſhip before ſhe could collect ſtrength enough to come to an anchor, which ſhe was ſome days in effecting, and which had prepared the remaining ſick for a more ſpeedy recovery.

In thoſe two ſhips it appears, that the loſs of men, from the time they had left England to the ceſſation of the mortality on the laſt mentioned iſland, amounted to near ſix hundred men, and almoſt the whole number by this fatal diſeaſe, which ſeemed to fall more ſeverely on the ſoldiers, marines, and invalids, than on the ſeamen; on board one ſhip, out of fifty invalids and ſeventy-nine marines, only four of the former and eleven of the latter remained alive, and in the other every invalid died, and only two marines eſcaped out of forty-eight.

After the ſick had been recovered, and the crews refreſhed at this iſland, the ſquadron proceeded to cruize on the coaſt of Mexico, and flattering hopes were entertained, that as no remains of the diſeaſe now appeared, warmer climates, to which they were approaching, would have contributed to prevent it's return, or at leaſt have mitigated it's violence and leſſened it's fatality; but in leſs than ſeven weeks after they had quitted the coaſt of Mexico, the fatal diſeaſe broke out again among the crews, and not only convinced them of the fallacy of their expectations, but exploded an opinion about the cauſe and nature of this diſeaſe, that plenty of proviſions and freſh water are effectual preventives of this malady; but in the preſent caſe a very conſiderable ſtock of hogs and fowls had been taken on board, on a ſucceſsful landing which had been made on the coaſt, great abundance of fiſh were taken every day, and the rainy ſeaſon had ſupplied them with ſuch plenty of water, that each man had an allowance of five pints a day, yet neither were the ſick relieved, or the progreſs and advances of the diſeaſe retarded.

Nor did theſe voyagers find themſelves delivered from this calamity even by the ſtricteſt attention to cleanlineſs, or the moſt liberal admiſſion of freſh air, though both have been generally conſidered as highly efficacious, if not in actually preventing, yet at leaſt in alleviating the horrors of this diſeaſe; on the contrary, the utmoſt pains that could be taken in cleanſing and ſweetening the ſhip, and the opportunity that offered of keeping all the ports open during the latter part of the run to Tinian, yet neither of theſe precautions ſeemed to produce any ſenſible abatement in the virulence of this diſorder.

It was in this part of the voyage that the ſurgeon of the Centurion, having exhauſted his utmoſt efforts for the relief of his numerous patients, and found all the meaſures he adopted totally ineffectual, reſolved to try the effects of Ward's pill and drops, medicines which had been at that time greatly celebrated, and one or both of them at different times were given to perſons in every ſtage of the diſtemper. Out of the numbers who took them, one was ſeized with a violent bleeding at the noſe ſoon after ſwallowing the pill, and though he was before given over by the ſurgeon, and lay almoſt at the point of death, yet after this hæmorrhage, he immediately found himſelf much better, and continued to recover, though ſlowly, till his arrival on ſhore a fortnight afterwards compleated his recovery.

But of the others who took theſe medicines, none appeared to receive any material benefit: ſome were relieved for a few days, but the diſeaſe returned again with as much virulence as ever; though neither theſe, nor the reſt who received no benefit, appeared to have been reduced to a worſe condition than they would have been if they had taken nothing.

The moſt remarkable property of theſe medicines, in almoſt every one who took them, was, that they operated in proportion to the vigour of the patient; ſo that thoſe who were ſo reduced as to be within two or three days of death, were ſcarcely affected by them, and as the diſeaſe was differently advanced, the operation was either a gentle perſpiration, an eaſy vomit, or a moderate purge: but if they were taken by one in full ſtrength, they then produced all the before mentioned effects with conſiderable violence, which ſometimes continued for ſix or eight hours without intermiſſion.

Upon the arrival of the Centurion at the Ladrone Iſlands, the ſalutary influence of the land was ſoon perceiveable; for though they had buried in two days before twenty-one men, yet they did not loſe above ten more from the day after they were landed, and reaped ſo much benefit from the fruits of the iſland, and particularly thoſe of the *acid* kind, that in a week's time there were but few of the ſick who were not ſo far recovered as to be able to move about without help.

In a later voyage, for the diſcovery of a North Weſt Paſſage, it was remarked, that this diſeaſe began to make it's appearance ſoon after the crew, who were before healthy, had met with an opportunity of indulging themſelves too freely in the uſe of ſpirituous liquors; and the progreſs of this fatal diſtemper among thoſe who made this voyage is thus deſcribed. The men when firſt ſeized with it began to droop, to grow heavy, liſtleſs, and at length indolent to the laſt degree; then followed a tightneſs in the cheſt, pains in the breaſt, and a great difficulty of breathing: to theſe ſymptoms enſued livid ſpots upon the thighs, ſwelled legs, contraction of the limbs, putrid gums, looſe teeth, a coagulation of blood upon and near the back-bone, with countenances bloated and ſallow; and theſe ſymptoms continued to increaſe till death carried them off either by a flux or a dropſy.

The medicines which, in other countries, are generally uſed with good effect, proved ineffectual here; for unctions and fomentations, when applied to contracted limbs, afforded no relief. Freſh proviſions, when they could be procured, ſeemed to be of ſome uſe, but did not produce laſting benefit.

The relater of this voyage ſays, the only powerful and prevailing medicine was tar-water, the ſteady uſe of which ſaved many, even after the diſeaſe was far advanced; yet the boaſted efficacy of this remedy ſeems to have fallen far ſhort of certainty, as it is acknowledged, that after the ſhip departed from the port where tar-water appeared to have been uſed to advantage, the crew began to relapſe into their old diſtemper, and many of them died of it, both in purſuing the voyage and on the paſſage home.

Nor have the effects of this diſeaſe been leſs terrible in armies than in fleets: and the following account of the progreſs and ſymptoms of a diſtemper among the Imperial troops in Hungary, in the year 1720, brings it ſo near that we have juſt deſcribed, that little doubt can remain of it's being the ſame diſorder.

In the firſt ſtage the gums are ſwelled, and are ſtained with livid ſpots, and theſe ſymptoms are followed by great putrefaction, a moſt offenſive ſtench from the mouth, and the looſening and dropping out of the teeth.

In the ſecond ſtage or degree of this malady, there is for the moſt part ſuch a contraction of the joint of the knee, that the patient cannot extend his leg; ſhooting pains are felt in this and other joints of the body, and the contracted knees are alſo ſwelled, with incredible pain and ſtiffneſs of the tendons, and the ſkin is covered with bluiſh extravaſations, interſperſed with ſmall milliary eruptions: in one night's time the eyes, and even other parts of the body, are covered with large livid ſpots, as if the patient had received bruiſes; the muſcles of the legs and even the cheeks become ſwelled and hard, but theſe ſwellings never ſuppurate; the pulſe is quick, ſmall, and hard; and the urine red, with a thick unequal ſediment.

If the patient continues the uſe of improper diet, as muſt be the caſe with many of the common ſoldiers, for want of neceſſaries and conveniencies, the malady advances to the third ſtage; the gums, together with the cheeks, become prodigiouſly ſwelled; a gangrene or rottenneſs of the jaw enſues, both which prove incurable; the difficulty of breathing is ſo great, that the patients not only faint away upon the ſlighteſt motion of the body, but frequently drop down dead ſuddenly as they are walking about; they generally complain exceſſively of this aſthma a few days before death, though they are neither troubled with a cough or ſpitting. All the ſpecies of dropſies and puffy ſwellings on the body accompany the advanced ſtage of this calamity to ſuch a degree, that if the patient lies with his head in a declining poſture for half an hour, it becomes ſo ſwelled that he is unable to open his eyes, and theſe ſwellings often diſappear and return: they are ſubject to profuſe hæmorrhages from the noſe, and in theſe deplorable circumſtances to a diarrhœa or dyſentery, which often cloſes the ſcene. In the beginning of theſe diſeaſes, neither the appetite or thirſt ſuffer any material alteration; but towards the height of the malady the former falls off, and the latter becomes extremely urgent.

The medical author, from whoſe experimental remarks this account is extracted, deſcribes various methods which were tried to abate the ſeverity of this diſeaſe. Among the reſt, upwards of four hundred were ſalivated, every one of whom died. Bleeding, and the whole tribe of antiſcorbutic medicines, were then adminiſtered with no better ſucceſs, nor did the volatile or fixed ſalts produce any favourable effect. In the ſituation of thoſe troops, neither the juices of freſh green plants, or of lemons, oranges, or other acid fruits, could be procured; nor a ſufficient quantity of milk, to provide whey for the numerous ſick, a drink which has been highly extolled for the cure of this diſorder. The Peruvian bark, which this author had ſome time before given with advantage, proved ineffectual, on account of the impoſſibility of procuring proper food to accompany this medicine; and muſtard-ſeed, which is ſaid to have ſaved the beſieged garriſon of Rochelle when they were over-run with this diſeaſe, failed to produce any favourable change, and the baths of the country were reſorted to with as little appearance of reſtoration.

This author alſo ſeems to be of opinion, that freſh vegetable juices and acid fruits, if they could have been procured, would have been the only effectual remedies.

Another ſpecies of this diſeaſe has alſo been mentioned, which has been denominated the *hot ſcurvy*, from the ſymptoms which attend it, though it has been generally found to prevail moſt in cold countries, and among troops which have been expoſed to the rigours of inclement ſeaſons.

It ſeems to be diſtinguiſhed from the kinds we have already deſcribed by various circumſtances; among others, the body appears to be rather emaciated than ſwelled; the gums are neither fungous or fœtid, though they are ſwelled, hard, hot, and ſo extremely painful and tender, that the ſmalleſt touch produces inexpreſſible anguiſh; the pains are leſs fixed than in the other ſcurvies; the patient's ſpirits are ſo affected, that he is continually complaining, ſighing, and lamenting his condition, and he has a conſtant but irregular fever; the pains fly from limb to limb, and from one part of the body to another, ſometimes from the back to the whole head, neck, and teeth, and at other times one ſide only of thoſe parts is affected; and after the moſt exquiſite torture has been endured in the upper regions, the pain ſuddenly deſcends and attacks the breaſt and ſtomach, both internally and externally, and occaſions extreme oppreſſion of the breath, and ſtitches in the ſides: going ſtill lower, the belly becomes the ſeat of the diſorder, where it occaſions wind, colic, pains like thoſe of the ſtone or gravel, and ſtoppage of urine; the knees are ſtiff and contracted, but in general not much ſwelled or inflamed, and the extremities are ſubject to twitches and convulſive ſpaſms; no ſpots appear on the patient's body, and the urine drops a thick, ſandy ſediment, and is covered with a thin, white, greaſy film.

This ſcurvy prevailed among the Ruſſian troops in the year 1736, who undertook the ſiege of Aſoph early in the ſpring, and in very piercing cold weather, accompanied with frequent rain, ſleet, and ſometimes ſnow; and, as there were no woods in the neighbourhood, the army ſuffered exceedingly for want of fuel: nor was this diſorder confined to thoſe troops which firſt opened the attack; others, which joined them afterwards, but had made a long and fatiguing march, or had been tranſported in boats down the river, were alike ſubject to it's ravages; for the ſiege having been protracted three months, the ſummer advanced with ſuch heat as was almoſt inſupportable, eſpecially in ſerene weather and during the hours of ſun-ſhine; and as this heat was frequently interrupted by days of rain, the alternate warmth and moiſture contributed to propagate this diſeaſe, which was alſo conſiderably heightened by an accidental circumſtance, which threw an amazing quantity of unwholeſome food in the way of this army; for the overflowing of the river brought with it ſuch a quantity of fiſh, that the whole camp lived on it for a great length of time, and having been before ſhort of proviſion, not only eat immoderately of this ſupply, but even uſed it half dreſſed, and kept it till it was in ſome degree putrid.

To theſe cauſes of ſcurvy may be added the impurity of the water, which being taken up from ſuch parts of the river as were fordable, and being contiguous to the camp, received the filth and naſtineſs of it; grew daily worſe and worſe, and was rendered ſtill more pernicious after the inundation, when it carried back into it's courſe an additional accumulation of noxious matter.

Nor did the miſchief of the overflow ceaſe with the return of the waters; the putrefaction of the aſtoniſhing quantities of fiſh left behind, aided by the intenſe heat of the days, and cold, damp, and moiſt nights, produced a moſt fœtid and ſtinking air in a thick and almoſt impenetrable fog; and the general diſcontent which prevailed, owing to the ill ſucceſs of their endeavours, and the various diſappointments they met with, tended to inflame their minds, increaſe the fever, and aggravate all the ſymptoms of the diſorder.

For this diſeaſe, the author of this account preſcribed emollient and oily medicines, with antiſpaſmodics and abſorbents; but the cure was compleated and the ſwelling, heat, and pain of the gums removed, by the juice or pulp of acid fruits.

Whoever will compare the ſufferings of theſe ſoldiers with the ſituation of Lord Anſon's ſquadron in it's paſſage round Cape Horn, will find that many of the cauſes which produced the ſcurvy concurred in both caſes, and that the difference in ſome circumſtances might naturally occaſion a diverſity of ſymptoms.

And from obſervations of a later date, made by a phyſician whoſe great abilities and minute attention were ſucceſsfully employed in the inveſtigation of the cauſes, nature, and ſymptoms of this diſeaſe, and whoſe ſituation enabled him to execute this taſk with peculiar accuracy, it appears, that bad proviſions, and bad water or beer, having by degrees tainted the juices of the body, and produced ſuch acrimony in the blood as diſpoſes it daily more and more to a ſtate of putrefaction, and theſe effects being greatly augmented by living conſtantly in a moiſt ſalt atmoſphere, and breathing foul polluted air, the moſt effectual method of correcting this alcaleſcent acrimony of the blood, and preventing the farther advances of putrefaction in the humours, is by vegetable and mineral acids, the former of which are much the ſafeſt, and may be given in draughts, the others by drops only.

From repeated inſtances, it appeared to this ingenious obſerver, that however the crews of a ſhip or fleet were reduced by this diſeaſe, or with whatever degree of violence and obſtinacy they appeared to be affected by it, yet on their arrival in a port, freſh proviſions, wholeſome liquors, freſh air, and, above all, proper fruits and herbs, ſoon purified the juices of the ſick, and reſtored them to health and ſtrength; a circumſtance ſo very obſervable in the ſhips employed in the Eaſt India ſervice, that if they happened to miſs touching in their paſſages at the Iſland of St. Helena or the Cape of Good Hope, where they were plentifully ſupplied with the above neceſſaries, the effect was conſtantly the prevalence of this diſeaſe, which ſeldom attacked them if they had an opportunity of refreſhing at theſe places.

That the ſtate of the blood in the common ſea ſcurvy approaches to putrefaction, is apparent from the ſtinking breath of the ſick, their corroded and rotten gums, high-coloured fœtid urine, foul ulcers, black, blue, and brown ſpots, and eruptions on the ſkin, frequently feveriſh heats, diſcoloured tongues, and bilious and bloody dyſenteries, which always attend it in a greater or leſs degree; that violent ſcorbutic caſes of this kind have often been ſurprizingly relieved by apples, oranges, and lemons alone; and that the officers, who are provided with wine, cyder, and the fruits laſt mentioned, are infinitely leſs affected with the ſcurvy than the poor common ſailors, who are without ſuch proviſions.

Hence this judicious writer is led to infer, that what will cure will prevent; and that if, therefore, a proper regimen can be uſed at ſea, it will prove a kind of continual antidote to the rank putreſcent qualities of the common ſhip's proviſions, and correct, or at leaſt very much leſſen, the ill effects of them; for which purpoſe he recommends the following.

That all ſhips which are to proceed on long cruizes or voyages ſhould be ſupplied with a ſufficient quantity of generous cyder, the rougher, provided it is perfectly ſound, the better; for if apples are found of ſuch ſervice in the ſcurvy, ſurely the juice of them, when it is become a vinous liquor, cannot but be highly ſalutary, and be well adapted as a common drink, to correct by it's acidity the alcaleſcent putrifying quality of bad proviſions: this cyder ſhould be at leaſt three months old, and be once racked off from the lees into ſweet veſſels, which will contribute to it's becoming fine, and prevent it from growing ropy, in which ſtate it is uſeleſs; ſhould any part of it turn to vinegar, which may ſometimes happen, it will even then be highly ſerviceable, both as an antiſcorbutic and in purifying the ſhip from diſgreeable ſmells; but if cyder is well managed, it may be carried to the Eaſt Indies without loſing it's flavour or body.

Of this cyder every ſeaman ſhould have a pint a day, beſides his water and beer, if the latter remains good; a quantity of vinegar ſhould alſo be daily diſtributed, to be uſed with their victuals, and in particular when the ſalt meats grow rancid; the decks ſhould be frequently waſhed or ſprinkled with this acid, or the fumes of it, heated, ſhould be conveyed to every part of the ſhip, and the air ſhould be changed frequently by means of ventilators.

When ſhips proceed on their voyages or cruizes in the autumnal ſeaſon of the year, a quantity of apples might alſo be carried, which being well choſen, and packed in dry tight caſks, would keep good for two or three months at leaſt; even lemons and oranges, wrapt in flannel, or any thing elſe that will imbibe their exhaling moiſture, kept in dry veſſels, and tolerably cool places, might be preſerved a long while; or if this ſhould be attended with difficulty, the juices of theſe fruits boiled to ſyrup, or made into ſhrub with rum or brandy, would prove more wholeſome than the fiery poiſonous ſpirits commonly ſerved out in the navy, the fatal effects of which have been already noticed. In caſe of ſtinking water, juice of lemon, elixir of vitriol, or vinegar, ſhould be always mixed with it, which will deprive it of great part of it's pernicious quality; and the ancients, particularly the Romans, were ſo well acquainted with this laſt mentioned acid as a preſervative, that they always carried a quantity of it in their fleets and armies.

And as it appears, upon comparing all the circumſtances, that the ſame cauſes producing the ſame effects, this diſeaſe may prevail as much on the land as at ſea, where the ſoldiery are expoſed to the ſame hardſhips, ſuffer the ſame inconveniencies, and are confined to the ſame kinds of proviſions, as thoſe who are employed in the ſea-ſervice, and that there is but one certain method of prevention or cure; it becomes an object of great importance to aſcertain the means by which vegetables and vegetable acids can be beſt and moſt eaſily procured, kept, and conveyed, both in the navy and among our armies and garriſons, as the life of every individual who is engaged in the ſervice of his country is too precious to be loſt by neglect or inattention, and of too high eſtimation to be ſacrificed to an inconſiderable addition of trouble or expence.

CHAP. II.

Of the Bilious or Yellow Fever of the Weſt India Iſlands.

THE following ſymptoms diſtinguiſh this fever from all others. The patient is attacked by a ſudden chillineſs, which is however of ſhort continuance, and is attended or ſucceeded by faintneſs, giddineſs, throbbing pains in the head and loins, glowings and fluſhes in the face, redneſs and ſcalding in the eyes, ſickneſs, nauſea, and diſpoſition to vomitings of bile, in ſome inſtances green, but generally yellowiſh and extremely bitter; a ſoreneſs and violent oppreſſion of the breaſt, a ſenſation of tightneſs over the cheſt, like that which might be produced by tying a cord over it, a difficulty and pain in breathing, reſtleſſneſs, wearineſs, anxiety, and depreſſion of ſpirits.

At the firſt ſeizure the pulſe is full, ſtrong, and quick, but after forty-eight hours, more or leſs according to circumſtances, it ſometimes becomes ſo regular and calm as hardly to be diſtinguiſhed from the pulſe of a perſon in perfect health, and thus it continues in ſome caſes for a day, or even ſome hours together; the blood which is drawn appears of a lively colour, but the *craſſamentum*, or ſolid part of it, is of a more looſe and flabby texture than ordinary; the ſkin is ſometimes dry, or if at all moiſt, is only partially ſo about the face, neck, and pit of the ſtomach, and this appearance of ſweat is probably produced by the patient's ſickneſs and ſtraining in attempts to vomit.

When the indiſpoſition has proceeded from forty to forty-eight hours, the eyes grow yellow, and ſoon after the whole ſurface of the ſkin takes the ſame tinge, the change beginning at the neck, and ſpreading upward and downward.

Towards the end of the third, or early on the fourth day after the firſt ſeizure, the texture of the blood becomes ſo diſſolved and broken down, as to make a paſſage through the moſt minute veſſels, and burſts from the noſe, mouth, eyes, ears, fundament, and through the ſkin where any bliſters have been lately applied; at this ſtate of the diſorder the pulſe undergoes another change, fluttering, ſinking, and ſometimes intermitting, and the patient grows heavy, drowſy, and at intervals delirious; to theſe ſymptoms ſucceed ſtartings, twitchings, and univerſal tremblings; what is diſcharged by vomiting now loſes the yellow colour, and turns brown or dirty like puddle water, and a ſediment reſembling coffee-grounds ſettles at the bottom after it has been ſuffered to ſtand a ſhort time; clots of coagulated blood, almoſt black, are vomited up, or thrown out ſuddenly, without any particular ſickneſs or immediate retching, and blood of the ſame appearance is voided both in ſtool and with the urine: and theſe are ſymptoms of ſpeedy mortality, as well as livid ſpots, which ſometimes appear a few hours before death on the breaſt and ſtomach, at firſt ſparingly, but ſoon increaſing in number, and extending to the back and ſides.

But though all theſe are ſymptoms of this diſorder, yet they do not always occur in the ſame perſon: in ſome the attack is not attended by any chillineſs, and others are neither affected by faintneſs, giddineſs, glows, or fluſhes in the face; in ſome caſes the yellowneſs of the eyes and ſkin is not obſervable, but the ſleepineſs and hæmorrhages ſucceed immediately after, the ardent ſtage of the fever; however, the favourable criſis generally occurs before the change of the ſkin is expected, or takes place during the continuance of that ſymptom.

Yet the yellowneſs of the ſkin is ſo frequent in this diſeaſe, that it may almoſt be conſidered as one of the inſeparable characterics of it; to which may be added the ſickneſs, nauſea, and inceſſant diſcharges of bilious matter by vomit, the oppreſſion on the breaſt, the difficulty of breathing, the freſh colour of the blood, and the ſoftneſs of the craſſamentum; theſe are ſuch certain ſigns of this diſtemper, that when they appear, no doubt remains as to the nature of the indiſpoſition; but if any of theſe ſymptoms are abſent, no preciſe judgment can be formed.

Nor do the ſeveral changes of appearance, or the approach of the ſymptoms, keep exact time in all caſes; in ſome the periods are earlier, in others later: thoſe we have mentioned may be conſidered as a medium, and will in general be found as correct as different circumſtances and conſtitutions will admit.

The progreſs of the bilious fever hath in ſome inſtances been ſo rapid, that the greateſt part of theſe ſymptoms have been gone through, and the courſe ended with the life of the patient in twenty-four hours: but this is a very unuſual caſe; five, ſix, ſeven, or eight days, is the common duration of it, and it is ſeldom or ever protracted beyond nine or ten.

This diſorder generally attacks thoſe who are newly arrived in theſe iſlands, and in particular viſits thoſe who indulge in any exceſs: drinking, or keeping late hours, and expoſure to the dews of the night, ſeldom fail to bring it on; but though it is commonly called *a ſeaſoning*, and thoſe who have once paſſed through it are apt to flatter themſelves that they are exempted from it's returns, yet this is by no means to be depended on, any more than another general idea, that after a few months reſidence there is no great reaſon to fear it's attacks.

The principal objects in the cure of this fever are, to correct the too great tendency of the blood to putrefaction, and to diſlodge the putrid bile as ſpeedily and ſafely as the caſe will admit.

On the firſt or ſecond day, where the patient is of a ſtrong conſtitution, and a full or ſanguine habit, it will in general be proper to take away a ſmall quantity of blood; from ſeven ounces to ten will in general be ſufficient, but this evacuation cannot be repeated without the riſque of ſinking the patient too low, and after the third day the operation of bleeding is in no caſe to be admitted.

After the bleeding the following clyſter may be adminiſtered.

Take of common decoction, eight ounces—of lenitive electuary, one ounce. Diſſolve the electuary in the decoction, and add two ounces of ſweet oil and a ſpoonful or two of brown ſugar.

The ſick are generally coſtive in the firſt approach of this diſorder, which tending ſo quickly to putrefaction, it becomes highly neceſſary to clear the bowels, and it frequently happens that bilious ſtools follow the return of the clyſter, and almoſt conſtantly if the vomiting has occurred before it is given.

As this diſorder is commonly attended with great thirſt, the patient may drink freely of a ſherbet made with lime-juice, and ſweetened to the palate; this ſhould be taken about the warmth of milk, but as the intenſe heat of the fever ſometimes induces the patient to requeſt it cold, it will be more adviſeable to let him have it in this ſtate, than that he ſhould omit taking it, as it operates both as a powerful antiputreſcent and anti-emetic.

On the firſt uſing this beverage, it is commonly thrown up as faſt as water after an emetic; but when the patient can be prevailed upon to perſiſt in drinking it, his ſick and vomiting fits will grow leſs ſevere, and after the rejection of the firſt three or four draughts, each ſucceeding one will remain longer on the ſtomach than the laſt, till the intervals between the vomitings are of ſo conſiderable a duration, that gentle purging medicines may be adminiſtered; for which purpoſe the following is directed.

> Take of the pureſt manna, two ounces—of vitriolated tartar, ten grains. Diſſolve theſe in ſix ounces of whey made with Madeira wine, and add one ounce of the pulp of preſerved tamarinds. Strain this mixture, and throw into it half an ounce of the tincture of ſenna: divide the whole into four equal parts, and give one every hour until a looſe ſtool is procured.

> Or, diſſolve one ounce of manna, and half an ounce of cream of tartar, in one pint and half of the ſherbet or lemonade, leſſening the proportions of acid and ſugar in making it. Of this mixture a ſmall tea-cupful may be taken, and repeated as often as the ſtomach will bear it without exciting vomiting, till the body is ſufficiently open, continuing the uſe of the medicine at ſuch intervals as may keep it in that ſtate.

Beſides the ſherbet, the ſick may be indulged in the moderate uſe of thoſe cooling, ſubacid, and antiputreſcent fruits, with which this climate abounds; ſuch as oranges, pine-apples, allegator pears, and ſhaddocks; which, if not taken in immoderate quantities, are ſo far from being hurtful, that they are in general highly beneficial.

But as the appetites of the ſick require to be courted with perpetual variety, ſo even this ſherbet, pleaſant as it is, will ſoon become loathſome, and may likewiſe diſagree with ſome ſtomachs: it may, in either of theſe caſes, be changed for thin gruel, barley-water, or emulſions of the cold ſeeds or almonds; or a drink may be made by pouring boiling water on pieces of the caſſada bread toaſted, and letting it ſtand till it is nearly cold; or, if this bread cannot be got, ſea-biſcuits may be ſubſtituted, which ſhould be well toaſted without being burned, and broke in pieces before the water is poured on them. Where it can be had in ſufficient quantity, the liquor of the cocoa-nut is an admirable drink, being a pleaſant, cooling, natural emulſion or whey. Of this milk, as it is called, each nut contains from half a pint to a quart.

In ſome caſes, after the firſt claſs of ſymptoms has proceeded a day or two, and the patient perſeveres in drinking freely of the lemonade warm, though he may have been indulged with a draught of it cold now and then, a ſweat breaks out, which frees him from the farther progreſs of the diſeaſe, and removes all apprehenſions of danger; for when the ſweat is copious the vomiting is ſeldom of long continuance, and on the ceaſing of this ſymptom, the pains of the breaſt and difficulty of breathing are ſoon relieved; ſometimes even before the ſkin turns yellow, though more frequently during the time this appearance continues: and this favourable criſis in ſome caſes occurs, even in the laſt ſtage, provided the perſpiration comes on before the ſpots and black vomits; after theſe ſymptoms appear, few hopes can be entertained, though inſtances have been known of patients being ſaved by ſweats when they have been in extremity.

After the external bleedings already mentioned ſome patients have recovered; though when the blood ariſes from the gums, noſe, or eyes, when it is diſcharged with the urine, or paſſes inſenſibly from the fundament, there is a very conſiderable degree of danger; and when the vomitings are black, or of a coffee-colour, a mortification has in all probability already taken place.

The manna and cream of tartar may be occaſionally continued through the courſe of the diſeaſe; or, if it appears neceſſary to increaſe the frequency of the bilious ſtools, a tincture of rhubarb may be given inſtead of it; and this may be prepared with weak cinnamon water, to render it grateful to the ſtomach and agreeable to the taſte, and may be given occaſionally, as the ſtomach will bear it, in the ſame manner as the other medicine.

If this fails of ſucceſs, the clyſter may be adminiſtered if poſſible, which is not always the caſe, the heat and acrimony of the bilious ſtools ſometimes occaſioning ſuch tenderneſs in the extremity of the *rectum* as to produce extreme agony on any attempt to introduce a pipe, however ſmall and ſmooth.

When any moiſture on the ſkin, or tendency to perſpiration, is diſcoverable, it will be right to diſcontinue the opening medicines, and give from half an ounce to an ounce of Mindenerus's ſpirit, which doſe ſhould be repeated at the end of five or ſix hours, if the ſweat continues ſo long; and ſage tea, acidulated or not, as the patient chuſes, ſhould be given frequently to encourage this diſpoſition. Attempts to procure ſweats by medicines are generally unſucceſsful; thoſe which occur are for the moſt part ſpontaneous, and nature ſhould be gently ſolicited, but not forced to continue them.

Bliſters on the thighs are often of conſiderable uſe to check the vomiting and relieve the oppreſſion of the breaſt and painful breathing; and the ſeaſon for applying them is about twelve hours after the commencement of the yellow ſtage, which, as we have already obſerved, generally happens about the cloſe of the ſecond day, or beginning of the third, after the ſeizure. Theſe bliſters, raiſing an artificial inflammation in one part, cauſe an abatement of the natural ones in another, and are more apt to produce this effect when placed on the lower limbs, than on the arms, back, ſhoulders, or other ſuperior parts of the body.

As theſe bliſters grow troubleſome the vomitings commonly begin to abate, and the increaſed irritation and inflammation of them generally carry off this ſymptom entirely; nor ſhould we be intimidated from applying them in this diſeaſe, becauſe, from their being apt to occaſion greater degrees of inflammation in the thighs than in other parts, danger may be apprehended that they may bring on gangrenes: this is a circumſtance which never happens unleſs there is a previous general tendency to mortification in the habit; and though, when this is the caſe, the bliſtered parts may mortify firſt, yet this is by no means a proof that the bliſters occaſioned the mortification; on the contrary, it is pretty certain that they never of themſelves produce any ſuch effect, and that the pain and intenſe inflammation round their edges are generally favourable ſymptoms, and foretel the departure of thoſe which are equally diſagreeable and much more dangerous. Nay, in ſome inſtances, where the vomiting is extremely ſevere, and the intervals between the fits ſo ſhort that no medicines taken internally will ſtay long enough on the ſtomach to operate with advantage, the cure muſt depend entirely on bliſters and clyſters; but it ſhould be obſerved, that the former ought always to be applied long before that ſtage of the diſorder in which the texture of the blood is broken down and diſſolved, that they may produce their effects in the prevention of this alarming ſtate of the diſeaſe.

The approach of the yellow ſtage may be conſidered as the criterion of danger: if the ſymptoms are violent, this appearance comes on early, and denotes a ſevere illneſs; if, on the contrary, it does not come forward till the fifth day, the diſeaſe may be expected to be more mild, and hopes may be entertained that it will end favourably; but when it happens in the firſt or ſecond day, no time ſhould be loſt in applying the bliſters; and when the firſt ſtage is protracted without the change of the ſkin, which, as we have obſerved before, never takes place at all in certain inſtances, it will be right to bliſter at nearly the ſame diſtance of time from the firſt attack that this change would have taken place fully, which will be about twelve hours before the third ſtage is expected to commence.

Towards the cloſe of this fever ſcabby eruptions frequently break out about the mouth and noſe, and in ſome caſes boils of different ſizes, but ſcarce any of them exceeding that of a hazel-nut, riſe in the breaſt, neck, ſhoulders, and about the hips; either of theſe appearances prove critical, though theſe little tumors ſeldom ſuppurate, but turn black and ſeem to mortify at the top like common carbuncles, and theſe parts ſlough off and leave little ulcers, which digeſt and heal very ſpeedily. Theſe favourable eruptions generally happen in caſes where the ſymptoms have been rather tedious than acute, ſo that the diſorder hath exiſted till the ninth or tenth day, and the boils are very apt to appear, and rather of a larger ſize near the ſeats of the bliſters, where however they never produce any ſort of ill effect, except indeed the bliſters ſhould be imprudently placed on parts where the bones are but thinly covered with fleſh, in which caſe there may be ſome apprehenſion of the bones being affected, as in warm climates they very frequently become carious if by any accident they are laid bare; and this may ſerve as a caution againſt placing bliſters on any other than fleſhy parts of the lower extremities, ſuch as the thighs or the calves of the legs.

A criſis of another kind ſometimes though not often occurs, to the preſervation of the patient's life, and this is a ſmall florid eruption, appearing in one or more cluſters on or very near the pit of the ſtomach; theſe cluſters are compoſed of ſpots or puſtules not larger than meaſles, and from three to eight in a cluſter: this appearance may always be relied on as a certain ſign of the patient's ſafety.

But, in whatever ſtate of this diſorder relief arrives, and whether it is procured by the evacuation of bilious ſtools, by perſpiration, by boils or eruptions, or by the application of bliſters, as ſoon as the vomiting ceaſes, and it is apparent, from the abatement of the oppreſſion on the breaſt and of the difficulty of the breathing, that the fever begins to decline, the bark ſhould be adminiſtered; but though it will, under theſe circumſtances, be of eſſential ſervice, it might be attended with diſagreeable conſequences if it was offered ſooner.

This medicine may be given with advantage in either of the following forms.

Take of the bark groſsly powdered, half an ounce—of ſnake-root, one dram and half. Infuſe theſe ſix days in a pint of Port wine; pour it off fine, and give three or four ſpoonfuls every four hours, or oftener if the patient's ſtomach will bear it.

Or, take half an ounce of the bark, powdered as before—of ſnake root, two drams. Boil them fifteen minutes in one pint and half of water; ſtrain it off, and add to the decoction one ounce of ſtrong mint water, and half a tea-ſpoonful of ſpirit of lavender. Adminiſter as the laſt.

On the departure of this fever, it leaves the patient extremely weak, but this may, at leaſt in ſome meaſure, be avoided by great care and attention in the ſickneſs: during the vomiting ſtate, which generally laſts two days, little can be done towards ſupporting the patient; a ſpoonful or two of Port or Madeira wine, ſweetened with ſugar, and diluted with about one third part of warm water, may be given now and then, over and above the common drink; and as ſoon as the intervals between the vomitings are lengthened, it will be proper to endeavour at fixing a little ſoft, mild, and nouriſhing food, on the ſtomach, ſuch as ſago, ſalop, rice gruel, or panada, adding to each a ſmall quantity of generous wine; and this kind of food ſhould be continued for ſome days after the criſis, and from this time good teas and broths, made with young animal fleſh, will contribute to the recovery of ſtrength.

The attacks of this fever are generally made after violent exerciſe, exceſſive drinking, or expoſure to night air, and particularly ſleeping in it; though thoſe who are moſt regular, and uſe the utmoſt precautions, are by no means ſecure againſt them.

Thoſe whoſe habits are full, and their conſtitutions robuſt, are not only more liable to this diſorder, but paſs through it with much greater difficulty than perſons of thin and ſpare habits and relaxed fibres.

Native white men of the iſlands are ſeldom affected with this diſorder, except after debauches or violent exerciſe; yet going to Europe and returning, they are as ſubject to it as Europeans. Women, who are natives of theſe iſlands, are never ſeized with it; an exemption for which they are probably indebted to their extreme temperance, and to their being free from all thoſe employments which require expoſure to the ſun or air, all out-door occupations being performed by negro ſlaves, none of whom, of either ſex, natives or foreigners, are ever known to be attacked by it.

Women from Europe ſometimes ſuffer in this diſeaſe, though not ſo commonly as the men, who frequently have it as often as they return to Europe, and come back to the climate of theſe iſlands. Youths are ſeldom liable to it till the approach of manhood.

In the enumeration of preſervatives againſt this diſeaſe will be included the beſt precautions that can be offered againſt moſt of the diſeaſes of theſe climates, and being thrown together in this Chapter, the neceſſity of repeating them under the head of every particular diſtemper will be avoided.

The firſt and chief preventive article is temperance, both with regard to food and liquors; and this is more particularly to be attended to on the firſt arrival from Europe, but muſt by no means be diſregarded during a reſidence in thoſe iſlands, by perſons who are diſpoſed to ſacrifice ſome indulgences to the preſervation of health.

In all countries a due mixture of animal and vegetable food is requiſite, but in theſe warmer climates the balance ſhould be in favour of vegetables; with thoſe, freſh meats of all the uſual kinds, together with fowls and fiſh, may conſtitute a wholeſome diet; added to which, the pleaſant and mild ſubacid and acid fruits with which theſe iſlands generally abound, and the aromatics which Providence has ſo plentifully provided, being uſed with moderation, will contribute to preſerve the ſolids from relaxation, and the fluids from putrefaction.

The moderate uſe of wine is not only allowable, but neceſſary, in theſe climates, as well as a more liberal indulgence in ſubacid cooling liquors; a few glaſſes of good Madeira, or other generous wine, is neceſſary to health, and the beſt common drink is weak wine and water, or very ſmall punch, made with well-ripened fruit and rum of a proper age. Since theſe regulations have been attended to, and the iſlands being better peopled and more cultivated are cleared in a great meaſure of the woods, the new comers are much leſs ſubject to *yellow and bilious intermitting fevers*, and *the dry belly-ache* and *dropſies*, than when the uſe of new rum prevailed generally, and people of all ranks indulged in exceſs and debauchery; the air, too, being rendered noxious for want of a free paſſage for the winds, and few vegetables being produced to correct the animal food.

The only proper time for exerciſe is in the morning, when the air is cool and refreſhing; thoſe, therefore, who deſire to live long and enjoy health, muſt keep good hours and riſe early. It has been remarked in ſome of the Weſt India iſlands, that none have ever arrived at old age who have been addicted to lying late in bed.

The exerciſe muſt be proportioned to habit of body, conſtitution, and other circumſtances. It may ſerve as a general rule, that it is ſalutary, as long as it does not produce diſagreeable fatigue; and it is certain, that the beſt eſtabliſhed health will decline from the neglect of it: in theſe climates, however, it ſhould be taken before or about ſun-riſing, and be avoided in the heat of the ſun.

Bathing, practiſed with due caution, will undoubtedly contribute conſiderably to the preſervation of health in theſe warm climates; but the moſt proper time for this purpoſe is either early in the morning before ſun-riſing, or in the middle of the day, when the water is ſufficiently warmed; it is extremely dangerous to plunge at any time of the day into water, which having been ſhaded is perfectly cold, and it is peculiarly ſo when the body is heated by exerciſe.

Cleanlineſs of all kinds is eſſential to health; about the perſon it is neceſſary to prevent the obſtruction of perſpiration, and about houſes and habitations it is indiſpenſible, in countries where every periſhable ſubſtance hath ſuch a tendency to ſudden putrefaction.

Great regard is due to cloathing in theſe warm climates; men are apt to expoſe themſelves with no other covering than their linen to thoſe ſharp breezes which frequently come on in the hotteſt weather, and this too when they are heated with wine, or in a profuſe ſweat from exerciſe; ſuch acts of imprudence are generally attended with very fatal conſequences. It would be right for the inhabitants of theſe iſlands, and eſpecially thoſe who are removed to them from Europe, to accuſtom themſelves to wear a looſe gown or other upper garment, which might be leſs reſtraint to them in their ordinary occupations than tight cloathing, and yet be always ready to wrap round them in the intervals of reſt, or on the approach of thoſe breezes. It has alſo been warmly recommended to thoſe who reſide in the Weſt India iſlands, to wear a piece of flannel over the breaſt and pit of the ſtomach, by way of what the French call *prudence:* this would particularly protect ſuch as are obliged to expoſe themſelves to the noxious air of the night, or who are not cautious enough to cover themſelves warmly in their beds during this ſeaſon. Sleeping abroad by day or night, or lying down on the graſs, and particularly in moiſt places, or ſuch as are ſheltered by woods, are ſuch deſperate follies, that we apprehend admonitions againſt them are unneceſſary.

It is equally dangerous to keep the ſame cloaths on after they have been wetted with rain, or moiſtened by perſpiration; in both caſes they ſhould immediately be changed, care being taken that thoſe which are to ſupply their places are perfectly dry and rather warm.

And, as an accompaniment to all the other precautions, it is abſolutely neceſſary to ſupport the ſpirits; the dread of thoſe diſorders, to which new comers are always told they are peculiarly liable, hath in many inſtances been productive of them, and apprehenſion of danger is frequently the occaſion of it. Under the ſalutary regulations which we have collected, moſt of theſe diſeaſes may in general be avoided; but ſhould they occur, they are by no means ſo fatal as hath been too often repreſented: the proper method of treatment is well known, and experience hath ſhewn us that danger may be in moſt caſes obviated.

CHAP. III.

Of the Intermitting and Remitting Fevers of the Weſt Indies.

BOTH theſe diſorders begin with ſhiverings or chillineſs, ſucceeded by the ſymptoms which uſually denote the approach of an ardent inflammatory fever: in *the intermittent*, of which we now ſpeak, bilious vomitings for four or five hours, and a pretty high delirium, are frequently added to them; in theſe caſes it is neceſſary to bleed, and the blood after ſtanding will be found to be ſizy, and the ſurface covered with a buffy ſkin. If the paroxiſm continues any conſiderable time, it will be right to empty the bowels by a clyſter; to recommend ſome emollient drink, acidulated with the juices of fruits, to be taken freely; and in ſome caſes to order a bliſter to be applied between the ſhoulders. Theſe fits are generally followed by intermiſſions, in which the patient is free from all the ſymptoms, and in particular his faculties are perfectly reſtored; but theſe intervals are ſeldom of longer continuance than five or ſix hours; and though the ſucceeding paroxiſms are not in general ſo intenſe as the firſt, yet they are for the moſt part of greater duration, and are ſometimes apt to degenerate into a conſtant fever for three or four days, in which ſtate of the diſorder the patient is always in conſiderable danger.

The departure of the delirium is generally followed by a moiſture on the ſkin, though not a ſufficient perſpiration to carry off the heat or lower the pulſe; yet at this time the bark may be adminiſtered with ſafety and ſucceſs, and advantage muſt be taken of the intermiſſion, to give a ſufficient quantity of this medicine to leſſen the violence of the ſucceeding paroxiſm: it may be given in ſubſtance to the amount of a ſcruple and half or two ſcruples, in a doſe made into the form of an electuary with common ſyrup, and repeated ſo often as to get down from an ounce to ten drams in an interval of ſix hours; in this form the ſtomach will generally retain it, but if it ſhould be once rejected, the attempt ſhould be made again in half an hour, when it will very probably ſucceed; the bark may be waſhed down with a draught of lemonade, which being equally agreeable and refreſhing, will contribute in no ſmall degree to the retention of the medicine, and all means ſhould be tried to get down a ſufficient quantity of it in the intermiſſion, as without it the ſecond fit is frequently of ſuch duration as to prove fatal.

Nor muſt the adminiſtration of the bark be omitted, even when it has anſwered the purpoſe of checking the progreſs of the diſeaſe and carrying off the fever: this diſorder ſometimes returns at the diſtance of three weeks, a month, or even five or ſix weeks; it will therefore be prudent to continue the doſes of the bark twice or thrice a day for two or three months after the illneſs, which is rather more effectual than omitting it for a time, and then giving larger quantities every ten days or fortnight periodically, which is ſometimes the practice, continuing the uſe of it this way for three or four months.

The *remitting fever* is never attended with the ſame violence of ſymptoms as the *intermitting*; but the paroxiſms are of longer duration, and the remiſſions of ſhorter continuance: in this diſorder a delirium ſeldom occurs, though the patients ſeem confuſed at being aſked any queſtions, but ſoon recollect themſelves, and anſwer clearly and ſenſibly; in their ſleep they are much diſturbed, and exhibit ſigns of great uneaſineſs, tumbling and toſſing about, and talking aloud: they are ſeldom troubled with the bilious vomitings, though they have an almoſt conſtant ſickneſs at the ſtomach, on which their food and drinks are kept with difficulty, and the pulſe is ſmaller than in the intermitting fever, and rather more quick and hard.

The operation of bleeding is not only proper in moſt caſes of this diſorder, but will in many bear repeating, but the quantity taken off at a time ſhould be ſmall; after the firſt bleeding, it will be right to give from eight to fifteen grains of ipecacuanha, and from one grain to two of emetic tartar, in proportion to habit and conſtitution, which not only empties the patient's ſtomach, but frequently his bowels, by procuring a ſtool or two. After the operation of the emetic, the patient ſhould be put to bed, and any tendency to perſpiration which may appear, ſhould be promoted by giving from ſix drams to an ounce of Mindinerus's ſpirit, and frequent draughts of ſage tea, or vinegar whey; and if by theſe means a copious ſweat can be induced, the interval may turn out to be a perfect intermiſſion inſtead of a remiſſion.

In the latter caſe, however, and when theſe remiſſions are imperfect or ſhort, and the fever continues without abatement, the bleeding may be repeated once or twice, according to circumſtances, ſome gentle laxative medicine may be given to keep the body open, and bliſters applied to the arms and neck, but the preciſe time for laying on the bliſters muſt depend on the immediate exigency.

As the ſymptoms of this fever are not ſo violent as thoſe of the intermittent, and the danger of conſequence not ſo alarming, ſo the neceſſity for adminiſtering the bark early is not ſo urgent, but it muſt be given freely at a proper time; that is, as ſoon as the fever clearly remits; and muſt be repeated frequently according to the ſymptoms: in theſe caſes a decoction of this medicine with ſnake-root is adviſeable, and the neutral ſalts may now and then be taken with ſome advantage.

But this diſorder, as well as the former, is apt to return, notwithſtanding every preventive caution that can be uſed, and theſe returns do not admit of bleeding ſo univerſally as the firſt attacks, though a neceſſity for it ſometimes appears; bliſters are almoſt always required in theſe relapſes, as the relaxation of the ſolids increaſes with every freſh ſeizure, and the circulation becoming more languid, ſtands in need of ſuch a ſtimulative.

The cold bath may accompany the bark, when the remiſſions are brought to regular intermiſſions, provided the patient's bowels and other inteſtines are free from indiſpoſition; the food ſhould alſo be light and nouriſhing, and the ſpoon-meats ſhould always have a mixture of good Madeira wine.

The remiſſions and intermiſſions in both theſe fevers are irregular and uncertain, ſometimes occurring once a day, and ſometimes oftener; and in a few inſtances they aſſume the appearance of tertian agues, the fit only returning the third day, though the patients in theſe caſes generally grow worſe at the approach of night.

But when either of theſe fevers is of long continuance, and the frequent returns of the paroxiſm have weakened the patient conſiderably, other diſorders are apt to follow the general relaxation and debilitation of the habit; and dyſenteries, waſting diarrhœas, jaundice, dropſy, ſcirrhous livers, hectic fevers, and conſumptions, ſeize with fatal effect conſtitutions brought too low by the preceding diſeaſe to withſtand the force of ſuch attacks.

If any ſuſpicion ariſes from the ſlow progreſs of the patient's recovery, that ſuch conſequences may be apprehended, it will be right that he ſhould immediately change the air; and as the beſt ſituations are uſually taken for the towns in moſt of the Weſt

India iſlands, and the grounds around them are in general better cleared of wood than the more diſtant parts, a removal to them from the country will be often attended with good effects; at any rate, a dry ſituation in an open ſpot, ſheltered only from the land winds, is moſt favourable to the patient's recovery.

A voyage or cruize at ſea is alſo recommended, both for the removal of theſe diſorders when they prove tedious or obſtinate, and for recovery from the extreme weakneſs and numerous complaints which are frequently left behind them; and it is ſurprizing to ſee the effect which a trip of a few days will produce, the recovery from theſe diſorders at ſea being generally as certain and rapid as from the ſea-ſcurvy upon arriving at the land after a long and ſevere voyage.

CHAP. IV.

Of the Dry Belly-Ache of the Weſt Indies.

VARIOUS cauſes have been aſſigned as productive of this diſeaſe, ſuch as the quantity of lead uſed in the apparatus for making rum and ſugar; the quantity of new rum drank by the inferior claſs of people, among whom this diſorder has been ſuppoſed to be moſt prevalent; and the acid juices of limes and lemons, with which theſe iſlands abound, and which are very plentifully taken by the inhabitants; but experience and obſervation have proved that neither of theſe are to be conſidered as the real cauſe of this diſorder: the ſervants who are immediately employed in the boiling and diſtilling-houſes are leſs ſubject to it than others; the moſt debauched and drunken generally eſcape it, though it frequently attacks women, who are in this country remarkably abſtemious; and thoſe who drink much acid in their liquors are ſeldom or ever affected by it.

To another and very different cauſe from either of the foregoing is the *dry belly-ache* in moſt inſtances to be attributed; corrupt bile ſeems to be the foundation of this diſeaſe, and though, from injudicious treatment in long and frequent fits of this indiſpoſition, the bowels may be ſo diſpoſed to be affected with ſpaſms, that every obſtruction occaſioned by cold or irregularity will bring on an attack of this complaint without any particular bilious ſymptoms, yet it ſeems to be the general opinion at preſent, that it's firſt riſe may in almoſt every caſe be deduced from the cauſe which we have juſt aſſigned.

And this opinion will appear to be well founded, when we conſider that it is frequently not a primary diſeaſe, but ſo often follows fevers as to have produced a notion, which is almoſt univerſally received among the inhabitants of theſe iſlands, that the Peruvian bark occaſions this diſorder; which may probably be in ſome meaſure true where it has been adminiſtered injudiciouſly, and in particular inſtances, even in ſpite of all the precautions which ſkill or prudence could ſuggeſt.

Now, the fevers which attack white people in this country are in almoſt all caſes attended with a greater or leſs degree of diſorder in the firſt paſſages; many perſons diſcharge by vomits enormous quantities of bile, and others, though they may not be affected with vomiting, or even in ſome inſtances with nauſea, yet will appear in the event to be no leſs burdened with that fluid, which has been proved by adminiſtering ſo ſmall a doſe of purging ſalts as half an ounce to a grown perſon, who has in conſequence of it had no leſs than thirty ſtools in a few hours.

Nor will emetics always operate effectually in removing the offending bile; in thoſe fevers, however copiouſly it may have been diſcharged, either by vomit or ſtool, by natural or forced evacuations, yet the relief will frequently prove only temporary, and from the rapidity of the ſecretion, the ſtomach and bowels will ſoon be again loaded with a quantity equal to that which has been diſcharged; and though the diſorder ſhould actually go off in a compleat natural purging and vomiting, yet even here the recovery is not always permanent; on the contrary, after a few weeks the fever returns again with the ſame ſymptoms, and goes off in the ſame way, and ſo continues to recur till at laſt it occaſions an habitual and fatal diſcharge upwards and downward.

And as theſe fevers are almoſt univerſally of the remittent or intermittent kind, and of courſe require the uſe of the bark, and are not to be conquered without it, if that medicine ſhould have been imprudently adminiſtered before the bile is well cleared from the firſt paſſages, the conſequence is not unfrequently an attack of this endemial colic or dry belly-ache; and thus the bark may be ſaid to occaſion this diſeaſe, though the cauſe is, notwithſtanding, the remaining bile.

Not that this diſeaſe always happens in this manner: it frequently comes on after fevers in which the bile hath been effectually evacuated, and where no bark hath been given; in ſome caſes it follows fevers which have gone off without any medical help, and in others it occurs without any previous illneſs.

The ſymptoms are at firſt violent pains in the loins, advancing from thence to the region of the belly; conſtant tremors, and ſlight twitches, which increaſe by degrees to ſtrong convulſive ſpaſms in the bowels; theſe ſigns are accompanied by heat, thirſt, a foul and diſcoloured tongue, loſs of appetite and ſtrength, dejection of ſpirits, and diſturbed ſleep: as the diſeaſe gains ground, the convulſions grow more violent, and affect the mouth with contorſions; the eyes become fixed, and ſeem incapable of diſtinguiſhing objects; the ſpeech is affected as if with a palſy, the underſtanding is confuſed, and a total deprivation of it is not uncommon; epileptic fits come on, with the rattle, occaſioned by fruitleſs endeavours to diſcharge a quantity of viſcid phlegm which gathers to the throat; and the ſtomach labours to throw up more, which is prevented by ſpaſms, which contract both the orifices, and the patient is ſpeedily ſuffocated.

When this diſeaſe is brought on by colds, it frequently occaſions the loſs of uſe of the hands and lower extremities if the patient recovers; and in ſome inſtances the faultering of his ſpeech is removed with great difficulty.

Though this diſeaſe is denominated the dry belly-ache, from the coſtiveneſs which almoſt univerſally attends it, yet ſome inſtances occur where the patients are moderately lax even at the time they are in extreme pain.

The firſt attempt is to procure eaſe by opiates and antiſpaſmodics, and both may be adminiſtered with effect in oily clyſters; from half a grain to two grains of opium may be given by the mouth every two hours, or more or leſs frequently, according to circumſtances; and this may be made into a bolus, with from ſix to eight grains of aſafœtida, and waſhed down with a tea-cupful of the muſk julep; and a clyſter of warm oil, with from forty to ſixty drops of liquid laudanum, ſhould be adminiſtered once or twice a day, as the violence of the pain may direct.

Oily mixtures, ſpermaceti emulſions, broths of calves feet and veal, and ſago, jellies, and other food of the ſame kind, will be found of uſe to invelope and dilute the acrid bile; if the diſpoſition to vomit is troubleſome, temporary relief may be obtained by a draught or two of camomile tea, which will help to unload the ſtomach of ſome of it's offenſive contents: fomentations, warm baths, bladders of warm water, bags of heated ſalt, or hot bricks, wrapped in woollen cloths and applied to the belly, may be of ſervice in the extreme paroxiſms of pain.

When, by theſe means the violence of the ſpaſms is allayed, and ſuch an interval of eaſe procured as can be expected whilſt the occaſion of the pain remains unexpelled, it will be right to endeavour to procure ſtools by ſome ſuch gentle laxative as the following.

Take purging ſalts, and fineſt manna, of each an ounce—of oil of almonds, or ſweet oil, two ounces. Reduce the whole to an emulſion with the yolk of an egg, and give a table-ſpoonful, repeating it or increaſing the quantity till it takes effect.

The caſtor oil has been recommended for this purpoſe, but from the difficulty of procuring it freſh-drawn, it cannot be often uſed; when it contracts any degree of acrimony from keeping, it is not only nauſeous to the taſte and offenſive to the ſtomach, but it is apt to gripe and to occaſion a conſtant inclination to go to ſtool, and ſuch a bearing down, as if the whole contents of the bowels would be diſcharged at once.

In general, the medicines uſed to looſen the body ſhould be of the mildeſt, ſofteſt, and moſt relaxing kinds; yet, in deſperate caſes, where the pain continues long fixed, where the vomiting is continued, or the returns of it frequent, where the belly is much ſwelled and ſtretched, the pain intolerable, and no relief can be obtained by the opiates and antiſpaſmodics, ſo that there is apparent danger of immediate inflammation and ſucceeding mortification, it may be allowable to try the effect of bleeding, and adminiſtering as a more active purge a pill or two, or more according to the effect, with calomel; and this hath been known to ſucceed in procuring a paſſage when all other means have proved ineffectual, and with the aſſiſtance of a warm bath, and a clyſter of warm oil with liquid laudanum, as before directed, immediately after the operation of the calomel, hath procured ſuch eaſe, that the returns of the diſeaſe have never been violent after.

In theſe climates it is extremely difficult to diſcover when this diſorder, or indeed any other, is attended with internal inflammation, and eſpecially in negroes, as the pulſe is by no means to be depended on, which is hardly a ſufficient guide in many caſes to denote the preſence of a fever; nor indeed does a fever always accompany internal inflammations; even fatal peripneumonies and pleuriſies ſometimes proceed without any degree of fever.

During the uſe of the purging medicines which have been directed, the opiates and antiſpaſmodics muſt alſo be continued, and in nearly the ſame manner: the quantities and frequency of adminiſtration muſt however be governed by the violence of the pain and other circumſtances.

In this ſpecies of colic it is uſual for the laxative medicines to bring off a vaſt number of hard pellets like ſheep's dung, a diſcharge which is productive of great relief, and which takes place at different periods of the diſeaſe in different patients; it ſeldom, however, happens with the firſt ſtools, which are for the moſt part liquid, but it almoſt conſtantly removes a fixed pain which is previouſly felt about the middle of the belly; and, from a circumſtance which ſometimes happens of the patient's poſitively aſſerting that he has had no paſſage at all, though theſe hardened balls of the fæces have been plentifully evacuated, a doubt has been entertained whether the periſtaltic motion, or natural inclination of the inteſtines to expel their contents, might not affect the great guts below, ſo as to oblige them to evacuate, without removing any ſtricture which might take place above.

Nor is the diſcharge of theſe globules always critical; from the return of the ſpaſms more are commonly generated, ſo that it does not appear that the hardening the fæces is the cauſe of this diſorder, but rather the effect of it.

If the cauſe of the diſeaſe is gradually carried downward in the ſtools procured by the laxative and purging medicines, the uſe of them, with the opiates and antiſpaſmodics, may be continued till the complaints are entirely removed; but if, upon the relaxation of the ſpaſms in the bowels, and the procuring a paſſage, bilious matter ſhould be thrown up by vomits, or brought up by a kind of hiccup or involuntary gulping, and the diſcharge this way ſhould be attended with retching or other difficulty, and ſhould not appear to be ſufficiently copious, it may be promoted by a few draughts of camomile tea or other proper waſh; and if even this ſhould not fully anſwer the purpoſe, from one grain to two of emetic tartar may be given with conſiderable advantage, as it will tend to the evacuation of the cauſe of the diſeaſe, and conſequently to the ſhortening it's duration; but though theſe emetics are ſafe, and in ſome inſtances abſolutely neceſſary, where the purging medicines fail to diſcharge the bilious matter effectually, yet they ought not to be adminiſtered till eaſe hath been procured, and the patient's body is open for a free paſſage downward.

If the diſorder is treated in the way we have directed, and the cauſe perfectly removed as early as ſafety will admit, it does not often happen that any great or obſtinate degree of coſtiveneſs remains behind; on the contrary, it it ſometimes neceſſary to diſcontinue the uſe of the oily laxative emulſion, from an apparent inclination of the bowels to an oppoſite ſtate: ſhould, however, any ſuch coſtive diſpoſition occur, or the inteſtines continue to be in any degree affected with ſpaſms, theſe complaints may in general be corrected by the uſe of aſafœtida and the other fœtid gums, which will alſo in moſt caſes prevent the paralytic ſymptoms which we have already deſcribed.

This diſorder was once ſo prevailing in theſe iſlands, that there were but few of the inhabitants, and ſcarce any among thoſe who had been before reſident in Europe, but what had been ſubject to it in a greater or leſs violent degree, and it was ſomewhat extraordinary to meet with a perſon totally free from the paralytic ſymptoms which uſually followed it: at preſent it is much leſs frequent in it's viſitations, and the effects of it are ſeldom ſo fatal; a change which may in ſome meaſure be attributed to the more temperate manner of living, which has of late years been adopted, but may alſo be partly, if not principally owing to the attention, which from experience has been found abſolutely neceſſary to be paid to cloathing by day and warmth by night. The pernicious cuſtom which formerly prevailed of throwing off the coat or other upper garment the moment a man entered his houſe, though he was then moſt probably in a profuſe ſweat, and expoſing his body in that ſtate, covered only with his ſhirt, to the cooleſt air he could find, has long ſince been happily aboliſhed: and, among the prudent, the ſtill more dangerous practice of tempting diſeaſe in the cold air of the night in the ſame uncloathed condition, after being heated all day with violent exerciſe, or inflamed with large draughts of Madeira wine. In the days of which we are ſpeaking, the impatience of heat uſed to induce many perſons to ſleep under the cover of a thin ſheet only, though the night frequently become intenſely cold of a ſudden, and though the texture of the body is ſo rarified by the almoſt uninterrupted ſunſhine of this climate, that it is much more ſenſible of cold than where it is expoſed to a greater degree of it, but is prepared for it by the gradual and accuſtomed viciſſitudes of the ſeaſons.

The accommodation of the dreſs, not only to the weather but to the ſituation of the wearer, is now become a regular eſtabliſhment; inſtead of caſting off the coat, waiſtcoats of woollen cloth or ſtuff are added, and the doctrine which had been long inculcated even by phyſicians, that a thin dreſs is neceſſary to health in warm climates, hath been with very great juſtice exploded; for, if it be conſidered that perhaps far the greater number of diſeaſes are prevented by the admirable diſpoſition which Nature has provided in the animal ſyſtem for carrying off by perſpiration whatever is either noxious or uſeleſs to the body, and how important the diſcharge through the ſkin is for this purpoſe, no doubt will remain but that the mode of covering the human frame, which is moſt likely to promote this neceſſary evacuation, or at leaſt to prevent it's being obſtructed, is the moſt ſalutary.

Not that it is adviſeable to load on a quantity of thick and hot cloathing, which might bring on ſuch a degree of perſpiration as would tend more to waſte and debilitate than to eſtabliſh health; an alteration in the form of the outer garment would perhaps render any addition to it unneceſſary; and if inſtead of a tight frock, a large gown or coat was ſubſtituted, it might anſwer the double purpoſe of admitting air when it was ſuffered to hang looſe, and (as we have already ſuggeſted) of being wrapped round the body in caſe a cool or ſharp breeze ſhould come on ſuddenly.

We are aware, that in objection to an opinion, that imprudent expoſures to cold air and ſudden changes are the cauſes of this and many other diſorders in theſe climates, it may be urged that the negroes, who are more peculiarly liable to endure unſheltered the viciſſitudes of heat and cold, are leſs troubled than the whites with bilious diſorders, and ſcarce ever with the dry belly-ache: yet they are much more frequently attacked with other diſorders which are occaſioned by colds, and particularly thoſe of the ſtomach and bowels; and their exemption from ſymptoms of the bilious kind may poſſibly proceed from their uſing ſo ſmall a quantity of animal food as to be hardly ſufficient to aid the digeſtion of the vegetable part of their diet, but more probably from their conſtitutions being rendered hardy and robuſt by a life of conſtant labour and exerciſe.

CHAP. V.

Of the Small-Pox in the Weſt Indies.

WE have already, in a former part of this work, treated very fully of the *ſmall-pox*, both in the natural ſtate and under inoculation, and of the management of every ſtate and ſtage of this diſeaſe in the iſlands of Great Britain; but it hath been proved by experience, that the ſame mode of treatment, which hath been practiſed with unqueſtioned and almoſt uninterrupted ſucceſs in Europe, is not in all reſpects adapted to theſe warmer climates, and that very ingenious treatiſes, which have pointed out an unerring line of conduct in the country where they were written, have produced ſome inconveniencies by being cloſely and indiſcriminately followed in a very different climate: it may be very neceſſary to offer to ſuch of our readers as may have occaſion to viſit any part of the Weſt Indies, the method of treating the ſmall-pox in both ways, which hath been moſt ſucceſsful in this part of the world.

The mercurial and purging preparatory medicines recommended by the firſt practitioners of inoculation in Europe, have been found to anſwer perfectly as to quality in theſe iſlands; but mercury having in theſe climates a great propenſity to ſalivate, and eſpecially among the negro ſlaves, who having for the moſt part been accuſtomed to take mercurials for venereal complaints, their fluids are ſo impregnated with them, that a very ſmall addition will bring on a ſpitting with ſuch violence, that caution is required to prevent inſtantaneous ſuffocation, it is therefore neceſſary in all caſes, but more particularly in thoſe of negroes, to leſſen the quantity of the mercury, and the frequency of adminiſtering it by way of preparation for inoculation: nor can the people laſt mentioned bear ſtrong or repeated purgings; copious evacuations of this ſort are apt to occaſion dropſies.

Among the ſlaves, unleſs ſome particular cauſe demands it, preparation of any kind ſeems unneceſſary; ſhould it however be required, two doſes of mercurials, and as many of purging medicines, will in almoſt all caſes be ſufficient, and between theſe doſes an interval of three or four days ſhould be allowed; the ſecond doſes of each may be adminiſtered the evening and morning previous to the communication of the infection, or the night and morning following, which ever ſhall be found moſt convenient.

The principal difference which ariſes from the uſe or omiſſion of preparation is, that in the former caſe the diſeaſe is ſo extremely mild, that the greater part of thoſe who are not called to labour in the fields, have either no puſtules, or if any do appear, they never arrive at maturity, or only juſt about the inciſions; and that thoſe who are not prepared at all, have a few puſtules ſcattered about the body, but in ſo favourable a way, and the progreſs through the ſeveral ſtages is ſo mild and regular, that the eruption ſerves only to prevent diſputes whether the patient has really paſſed the diſtemper or not.

In caſes where a woman who gives ſuck is to be inoculated with a child at her breaſt, it is adviſeable to prepare; and in this circumſtance, in the interval between the mother's two doſes of preparatory medicines, from one grain and half to three grains, according to age, of the mercurial powder, may be given to the infant at night, with a gentle laxative the next morning: but if the child only is to be inoculated, the mother ſhould take one mercurial doſe and purge; two or three days after which the medicines laſt mentioned ſhould be given to the child, who may be infected immediately; and on the evening of the third day after the operation, the mother may take her ſecond mercurial doſe, and the purge on the ſucceeding morning.

It may alſo be obſerved, that notwithſtanding the effect which mercury has on grown people, yet it very ſeldom affects the ſalivary glands of children, or youth who are not yet arrived at puberty, or are but juſt paſt it; and ſo much better can children bear a large proportion of that medicine, according to the difference of age, than adults, that from one grain to one grain and half of calomel may be given to a ſucking infant with the utmoſt ſafety.

It is by no means uncommon to inoculate pregnant women ſlaves; indeed, it is in ſome caſes abſolutely neceſſary to their preſervation, where the ſmall-pox is epidemic, or the ſlaves with whom ſuch women are obliged to hold communication are in a courſe of inoculation: in theſe caſes the mercurials and purges ſhould be given with a very ſparing hand, and eſpecially if the patients are conſiderably advanced in that ſtate; and the moſt ſafe method of preparing ſuch ſubjects, is to divide the two doſes of each kind into three, increaſing the number of them, but proportionably leſſening the quantity.

In the mercurials to be adminiſtered after the infection hath been communicated, the ſame precautions muſt be obſerved with reſpect to quantity; and theſe medicines ſhould be given in the evening of the third day after the inciſions, unleſs the patient's mouth is affected by the preparatory doſes, in which caſe the repetition at this time muſt be omitted.

During the whole proceſs, the food allowed to ſlaves is generally the roots and vegetables which conſtitute their uſual diet, ſuch as yams, cocos, plantains, potatoes, and bananas, and their drink water, or a beverage made by the mixture of ſugar with it, and in ſome caſes the juice of limes or lemons: all poſſible care ſhould be taken to prevent their getting at rum, ſalted fiſh, fleſh, and thoſe ſpices or aromatics which are naturally produced in theſe iſlands; but if the mercury ſhould affect the ſalivary glands or gums, or they are indiſpoſed about the time of eruption, they ſhould be ſupplied with rice and flour.

On the fourth day from communicating the infection, it may be right to make an infuſion of ſenna, chryſtals of tartar, and purging ſalts, in water, in the following proportions.

> Take of ſenna leaves, two drams—of chryſtals of tartar, two drams—of purging ſalts, half an ounce. Infuſe in ſomewhat more than half a pint of boiling water. Let it ſtand till it is almoſt cold, then ſtrain it off, and add to the liquor an equal quantity of melaſſes.

Of this infuſion a ſpoonful or two may be given ſo often as to procure a ſtool or two a day, till the appearance of the eruption is compleat; and this ſame medicine may ſerve for the laxative potion for children during the preparation.

When the mercury and emetic tartar occaſion an effloreſcence or eryſipelatous raſh, which is ſometimes the caſe, theſe medicines muſt be omitted; and the patient ſhould be kept as much as poſſible in the ſhade in the cool air, and his body ſhould be opened with the laxative medicine: under this management this effloreſcence generally diſappears in two or three days, and is uſually ſucceeded ſpeedily by a very mild eruption.

Slaves are in general ſo little affected even by the eruption, as to follow their uſual occupations abroad through this and every ſtage of the diſorder; the eruptive ſymptoms are, however, ſometimes ſo troubleſome as to render a reſpite from labour neceſſary for two or three days, but they ſhould in ſuch caſes be obliged to remain in the air during the day, and to keep themſelves conſtantly moving, drinking draughts of cold water to allay their thirſt, and taking the laxative infuſion to procure frequent ſtools. If the fever is more ſevere, or continues longer than ordinary, a repetition of the mercurial medicine and purge may contribute to remove this ſymptom and promote the eruption.

If, during the appearance of the feveriſh ſymptoms, or before, the patient's mouth ſhould happen to be affected by the mercury, the farther uſe of that medicine muſt be omitted; the mouth ſhould be gargled with ſome emollient decoction: the food ſhould be of the ſofteſt kind, ſuch as flour milk, boiled rice, or the like, and the body ſhould be kept open; but even in this caſe the cold air and water are not prejudicial; and if the diſpoſition to a ſpitting ſhould increaſe, it may be checked by a doſe or two of the flowers of ſulphur; but a ſalivation, though troubleſome and diſagreeable to the patient, is ſeldom of any ill conſequence with reſpect to the diſeaſe.

After the eruption is compleated, the patients are in general capable of following their buſineſs without farther interruption; the only caution neceſſary being to avoid getting wet either in the feet or cloaths. The ſame mild and reſtricted diet ſhould be continued till the puſtules are fully dried off; when a doſe or two of gentle purging phyſic may be given, at the diſtance of three or four days.

Inflammations of the eyes are very common after the ſmall-pox in theſe climates, in which indeed the negro ſlaves are peculiarly liable to this complaint, though more particularly after inoculation: in theſe caſes plentiful bleeding and cooling purges are required; which, with a low regimen, nitre in the common drinks, and emollient poultices to the eyes, ſeldom fail to remove this diſorder. After the evacuations, bliſters may be applied behind the ears, and continued till the inflammation ceaſes.

The *impetigo*, or ring-worm, is alſo apt to ſucceed the ſmall-pox by inoculation; indeed, there is in general a diſpoſition in the conſtitution, from the treatment it has received in that diſorder, to throw out whatever matter, noxious to health, lurks in the habit: theſe eruptions, called the ring-worm, will, however, in almoſt every caſe yield to the internal adminiſtration of ſulphur, and the milder mercurial and ſulphur ointments.

But the new method of treating the ſmall-pox, hath not ſucceeded ſo well in the natural way as under inoculation; in theſe climates there is an apparent and very wide difference between the effects of mercurials and antimonial purges, adminiſtered before or at the time of communicating the infection, and the ſame medicines given after the poiſon has ſpread it's influence through the habit, and ſhews itſelf in feveriſh ſymptoms: when the patient has been treated in this way, it frequently happens that the fever is totally ſuppreſſed by the time the eruption is compleated, the puſtules very ſeldom maturate, but in moſt caſes continue crude, and in many never dry off except in the face, great quantities of a thin watery humour are diſcharged from the lower extremities, the patient grows daily more and more weak and low, and at length ſinks under the diſeaſe.

Among the negroes, when the eruptions are numerous, it is no unuſual caſe for the patient to be ſeized ſuddenly, about the time the puſtules begin to incruſt, with reſtleſsneſs and a ſevere fever, accompanied with delirium, and theſe appearances are ſometimes miſtaken for the ſecondary fever, and the caſe grows deſperate for want of proper relief; but when theſe ſymptoms occur in this ſtage of the diſorder, it will be proper to examine the patient's feet, when the cuticle or outer ſkins of the ſoles will be frequently found to be diſtended with matter, formed by the ſuppuration of the puſtules under this cuticle, which in theſe people who go barefoot is as thick as the under leather of a ſhoe, and this matter not being able to obtain vent, ſeparates the whole ſkin of the bottoms of the feet, and being confined, irritates the extremely ſenſible and naked veſſels of the ſkin, and produces the ſymptoms we have deſcribed: this cuticle ſhould be taken entirely off, and fomentations with mild dreſſings being applied, the feet may be eaſily healed, and every ill conſequence will be avoided.

It alſo frequently happens, that when the puſtules are nearly dried up, large ſwellings come on in the legs and feet, which ſoon ulcerate, and diſcharge large quantities of thin acrid matter; theſe ulcers may be waſhed with an emollient fomentation, though the negroes commonly uſe warm urine, and dreſſings of cerate epulotic may be laid over them.

This ointment is made as follows.

Take of olive oil, half a pint—yellow wax, and prepared calamine ſtone, of each a quarter of a pound. Melt the wax in the oil, and when the mixture begins to thicken, throw in the calamine ſtone, and ſtir the whole briſkly till the cerate is thoroughly cold.

During the formation of theſe ſwellings, and whilſt the ulcers continue open, or at leaſt till the diſcharge has nearly ceaſed, and a diſpoſition to heal appears, it will be right to avoid the uſe of all kinds of medicines; but as ſoon as theſe changes take place, a few doſes of purging phyſic ſhould be given.

The ſecondary fever differs in theſe climates from that of Europe; it is here like all other fevers of the intermitting or remitting kind: on the commencement of it, if it takes place before the puſtules are fully dried up, it may be proper to open the inteſtines by clyſters, in order to carry off as much as poſſible of the diſeaſed matter, and for the ſame purpoſe to obtain as copious a diſcharge as can be procured from bliſters; at the ſame time the bark ſhould be adminiſtered, and as ſoon as the puſtules are compleatly incruſted, a courſe of purgatives may begin.

CHAP. VI.

Of the Meaſles in the Weſt-Indies.

THE appearance of this diſeaſe differs conſiderably from that of Europe, and the management and treatment muſt of courſe be in ſome meaſure varied.

The firſt attack of the fever differs alſo greatly in different people; in ſome it begins ſuddenly with much violence, and after a day or two is accompanied by the eruption; in others it is of a ſlow intermitting or remitting kind, with daily paroxiſms, and precedes the eruption five or ſix days: the uſual ſymptoms of a cough, inflammations in the eyes and throat, anxiety, and reſtleſſneſs, are obſervable in a very high degree in this part of the world; but the moſt certain ſymptom of the approach of this diſorder, which occurs in this climate, is the appearance of white thruſh-like ſpecks about the gums, which are in almoſt all caſes viſible ſeveral days before the eruption, and in ſome inſtances even before the fever, ſo that it is actually ſometimes poſſible to foretel the meaſles before the patient hath received the warning of indiſpoſition; as the fever gains ground, and the appearance of the eruption grows nearer, theſe ſpecks, accompanied with an eryſipelatous inflammation, ſpread over the whole ſurface of the mouth and to the entrance of the gullet, and even as far down the throat as can be diſcovered; the cough becomes dry, ſhort, and tickling, harraſſing the patient continually, who notwithſtanding breathes with tolerable freedom, and is not incommoded with much ſenſe of oppreſſion at the breaſt in the intermiſſions of coughing; the pimples of the eruption do not appear ſo cluſtered as is uſually the caſe in Europe, but are more diſtinct, of a larger ſize, and more raiſed above the ſurface of the body in every part of it, and the inflammation and heat of the ſkin is more intenſe; as the eruptive appearances ſpread, and the puſtules grow more numerous, the inflammation of the eyes, mouth, throat, and ſkin, becomes more aggravated, and in many inſtances ſeems to be continued through the throat, ſtomach, and inteſtines; for the patient is in thoſe caſes commonly attacked with torturing gripes, and a purging ſometimes of blood and matter; and often accompanied with ſevere vomitings.

If the patient is bled, according to the degree of fever and violence of the other ſymptoms, and other requiſite medical aſſiſtance is adminiſtered, the eruption and the fever generally diſappear about four days after it firſt becomes viſible; but where medicine hath been neglected, or the bleeding hath either been omitted or practiſed too ſparingly, the fever will ſometimes increaſe at this ſtage of the diſorder, and the inflammatory eryſipelatous appearance of the fauces change to a diſagreeable ſwelling, the cough will grow more urgent, the vomiting be inceſſant, a dyſentery attended with acute and continual pains of the belly will come on, and the patient will either be carried off by the inflammation of the ſtomach and other inteſtines, or by a mortification ſeizing theſe parts.

And, notwithſtanding the utmoſt judgment that can be exerted in the treatment of this diſorder, a flux generally ſucceeds the fever and eruption ſooner or later, diſcharging (ſometimes mixed with liquid fæces, and ſometimes without it) a quantity of matter, for the moſt part accompanied, but not mixed with blood; ſharp gripings preceding the ſtools, which are ſometimes ſo frequent as to occaſion extreme danger; and beſide theſe gripings, the whole belly is affected with exceſſive pain and ſoreneſs, the patient's ſpirits are depreſſed, his ſtrength exhauſted, his appetite not only totally loſt, but his ſtomach rejecting all kind of food, the vomiting almoſt unintermitting, receiving no other than temporary relief from any medicine that can be exhibited.

In children, a conſtant teneſmus or bearing down to ſtool occaſions the rectum or ſtrait gut to be protruded from the fundament; and in pregnant women a diſcharge of blood from the womb, and ſometimes abortion, is brought on by this diſeaſe: and inſtances have occurred, where, for want of proper bleeding in the feveriſh ſtate of the diſorder, not only the fundament hath been ulcerated, but the thruſh or ſpecks which have appeared during the flux have been converted to corroding ulcers, and have ſpread over the mouth, throat, and lips; nay, a number of ſmall tumors have broke out in different parts of the body, and particularly in thoſe places which have been the ſeats of bliſters, and becoming troubleſome and fœtid ulcers, have mortified and brought on the patient's death.

Some are not attacked by the flux, but their ſituation ſeems more diſagreeable than that of others who have this diſcharge: in theſe caſes an itchy eruption commonly appears on the ſkin, and boils break out in various parts of the body; but if theſe appearances ſucceed the flux, they are in general favourable ſymptoms. During the flux, a feveriſh paroxiſm of ſeveral hours, or even a whole day, occurs in ſome inſtances, and in others an intermittent of uncertain continuance; and in moſt caſes, where the diſeaſe hath been ſevere, an inflammatory diſpoſition remains in the conſtitution for ſeveral months after: in ſome inſtances the flux exhauſts the patients ſo exceedingly, that they fall into dropſies; and it may in general be remarked in warm climates, that the hale, robuſt, and ſtrong, ſuffer moſt in this diſeaſe, and that thoſe who are of weak, tender, and emaciated habits, paſs through it almoſt without indiſpoſition.

As the two different periods of this diſorder are marked by fever and dyſentery, it will be proper to point out the method of treatment in each ſtate.

In the feveriſh ſtage of this diſorder few or none die, yet the ſafety of the patient in the ſecond or dyſenteric ſtate of it, depends in a great meaſure on the treatment in the former; the ſevereſt fluxes in all caſes attending thoſe who had the higheſt degree of fever and the moſt aggravated ſymptoms of inflammation, who are in general, as hath been before obſerved, the moſt robuſt and vigorous ſubjects.

It is neceſſary, therefore, to take proper meaſures to prevent the formation of morbid matter, which may require to be carried off by the inteſtines; and to this end, as ſoon as the patient complains, it will be proper to bleed, (unleſs the ſtate of body renders it abſolutely unſafe) according to age, habit, and other circumſtances: if the fauces are not at all, or but little inflamed, and the mouth only is affected, a moderate doſe of purging ſalts may be given the ſame day, or early the next morning, but this ſhould be omitted, if the appearance of ſo much of the throat as can be ſeen, gives reaſonable ground of apprehenſion that the inflammation has reached the ſtomach, as in this ſtate the ſlighteſt purgative is apt to produce too conſiderable a diſcharge in this way; and in thoſe caſes an emollient clyſter may be adminiſtered with advantage; the patient ſhould be directed to keep conſtantly in the air during the day, but to avoid the heat of the ſun, and to move about as much as poſſible; the common drink ſhould be decoctions of emollient herbs, taken ſomewhat warm, and if the ſtomach will bear it, ſmall quantities of nitre may be given; the cough may be alleviated by oily mixtures, or emulſions with ſpermaceti, and a few drops of liquid laudanum may be admitted at night to procure reſt; the mouth and throat may be frequently gargled with a decoction of the emollient herbs, ſweetened with moiſt, or as it is called in theſe iſlands, Muſcovada ſugar; and if the inflammation of the eyes is troubleſome, it may be cooled by the common collyrium or ſolution of white vitriol and ſugar of lead, but this ſhould be much diluted, or it will rather augment than alleviate the pain.

As the fever and inflammation increaſe, the bleeding ſhould be repeated, which may alſo in ſome inſtances be neceſſary, a ſecond time, when the fever is at the height and juſt before the eruptions begin to flatten; but the purging and vomiting which ſometimes come on at this criſis are alarming ſymptoms, and demand the immediate uſe of the lancet: and as theſe complaints are generally occaſioned by ſpaſms in the ſtomach and inteſtines, and are in moſt caſes attended with excruciating pain, it may be proper to follow the bleeding with opium, adminiſtered in ſuch conſiderable quantities, that two, three, or, according to the exigency, four grains of this medicine may be required for a grown perſon in the twenty-four hours; added to this, ſpermaceti, the compound powder of gum tragacanth, gum Arabic, the gum from the acajou tree, and ſtarch jelly, may be at times preſcribed in different forms, as well as in more urgent caſes, the teſtaceous powders, chalk, and the Armenian bole, reduced to a very fine powder, and ſtarch clyſters, with from twenty to forty drops of liquid laudanum; and by the uſe of theſe medicines, adapted to different conſtitutions and circumſtances, theſe ſymptoms are generally removed with eaſe, ſafety, and certainty.

In the feveriſh ſtage bleeding is chiefly to be relied on for the relief of the cough; where this ſymptom is more than uſually importunate, bliſters may be applied to the thighs, but under the preceding management they are ſeldom neceſſary; and under this treatment, after the eruption has continued upon the ſkin for about four days, it begins to diſappear gradually, leaving the body, as in Europe, covered with a kind of branny ſcales; and about the ſame time the inflammation of the mouth and throat abates, though the cough generally continues ſome time longer.

Immediately on the diſappearance of the eruption, in moſt caſes, but in ſome not till ſeveral days after, the dyſentery commences; though it is not a very uncommon caſe for the purging which began in the feveriſh ſtate, to be continued to, and form this ſtage.

If the inflammation of the mouth and throat is totally gone at the time the eruption vaniſhes, and the ſkin takes the ſcaly appearance, it may be expedient, whether the flux has or has not yet approached, to give a moderate doſe of manna and ſalts, with the addition of olive oil; but if any internal inflammation is ſtill ſuppoſed to ſubſiſt, it will be proper to defer the purging medicine a day or two.

In the evening after the operation of the opening medicine, it is always right to give a gentle opiate; if the flux is already begun, the laxative generally mitigates the ſeverity of it, or renders it's future progreſs leſs violent, but is not to be expected to carry it off, nor any more than the opiate to prevent it's continuance; on the contrary, the ſtools in general become more frequent from this period, which may be conſidered as the commencement of the dyſentery.

Should the cough continue to be troubleſome after the adminiſtration of the purging medicines, it may be relieved in moſt caſes by bliſters applied to the thighs.

The dyſentery being commenced with a diſcharge of blood and matter in the ſtools, and accompanied with ſevere griping pains in the bowels, and the patient having taken one doſe of the oily purge, the ſame courſe may be purſued as has been already preſcribed in the feveriſh and inflammatory ſtate; the ſame mucilaginous, ſoftening, and abſorbent medicines, being neceſſary to ſheath the ſtomach and bowels, and defend them from the acrimony of the diſeaſed matter, and the opiates being required to prevent the violence of the evacuation from exhauſting the patient's ſtrength, and bringing on faintings, as well as to quiet the ſpaſms, abate the pains, leſſen the inflammatory diſpoſition, and avert the dangerous conſequences of it's gaining ground: nor is there any danger to be apprehended, that by the uſe of the opium the matter may be pent up in the body, and a neceſſary diſcharge impeded; two, three, and in ſome extraordinary inſtances, four grains of opium, taken by a grown perſon in twenty-four hours, being at this time of the diſeaſe alſo barely ſufficient to put ſuch a reſtraint on the flux, as to prevent it's running the patient down in a very few hours, and yet a larger quantity than we have mentioned can hardly be admitted in any caſe.

If, from the appearance of the ſtools, and the continual teneſmus or bearing down to evacuate, the rectum is diſcovered to be much irritated by the acrid matter which flows through it; ſtarch clyſters, with from twenty to thirty drops of liquid laudanum, may be adminiſtered twice a day, which will not only procure preſent eaſe, and prevent the ulceration of that gut, but greatly leſſen, and by continued repetitions, after a time entirely ſtop the appearance of matter in the ſtools; from which circumſtance it may be inferred, that the ſource of this matter is commonly no higher than the great guts, and moſt probably in the ſtrait gut and the lower part of the colon only; an opinion which ſeems to be well founded, from an obſervation frequently made towards the decline of the dyſentery, that the patients have three or four ſtools in a day of a natural appearance and tolerable conſiſtence, and between theſe ſtools others of more matter, without even a mixture of fæces.

As we have already obſerved, there are certain caſes in which no flux occurs, and in ſuch inſtances a ſecond doſe of the oily purgative, about three or four days after the firſt, will moſt commonly compleat the cure.

When, by the uſe of the oily purgative, the opium, and the ſoftening, ſheathing medicines, the gripes and violent pains in the belly are either wholly gone or conſiderably abated, and the ſtools, though ſtill liquid, aſſume a natural appearance, the following medicine may be adminiſtered.

Take of rhubarb powdered, two grains—of Venice treacle, or mithridate, half a dram—of toaſted nutmeg, five grains. Make to a bolus with common ſyrup. Two drops of oil of nutmeg, or one of cinnamon, may be ſubſtituted for the powdered nutmeg.

This bolus may be taken twice, thrice, or four times a day, according to circumſtances, and a decoction of logwood, or of the bark of the guava tree, with the addition of ſome warm aromatic, may either be taken in the quantity of a large teacupful after every bolus, or uſed as a common drink. If the rhubarb in the bolus juſt preſcribed ſhould bring on a purging after being taken two or three days, it may be omitted for forty-eight hours, and then given again, and ſo alternately.

When the flux begins to decline, and the ſtools are conſiderably leſſened in number and are of a better conſiſtence, it will ſometimes happen that the belly becomes tight and painful, and ſhortly after a pretty ſmart purging ſucceeds, which continues two or three days, during which theſe diſagreeable ſymptoms are relieved, but return again as the purging decreaſes, and ſo continue to be eaſed by the purging, and recur on the ceſſation of it, for a conſiderable length of time.

As often as this happens, it is neceſſary to give a ſmall doſe of manna or rhubarb; the latter is to be preferred if it does not gripe, and after it's operation, the bolus may be again adminiſtered with the decoction as before directed, and in this manner to be perſiſted in with the interpoſition of rhubarb, whenever the tightneſs of the belly or looſeneſs occur, till the inteſtines are reſtored to the natural exerciſe of their functions; but whenever it is neceſſary to give the rhubarb doſe, it ſhould be omitted in the bolus for a day or two after.

It not unfrequently happens, that pretty early in this ſecond ſtage of the diſorder, in caſe it is attended with little or no purging, or towards the decline of it, if the flux hath been conſiderable, the patient loſes his appetite, and is troubled with ſickneſs, nauſea, and frequent vomiting: in theſe caſes an emetic of ipecacuanha, or the tartar emetic, may be given, and after it a moderate doſe of rhubarb; but though the ſymptoms may by this means be removed for a while, yet they are very apt to return, and it will generally be neceſſary to repeat thoſe diſcharges after a ſhort interval.

No ſmall degree of care is neceſſary to prevent relapſes, which happen from the ſmalleſt degree of exceſs or irregularity, or from taking cold; and ſuch a length of time is it before the habit is perfectly re-eſtabliſhed, that the flux has been known to return a month after it has appeared to be totally ſtopped, only by the patient's being wetted in a ſhower of rain, or getting damp in his feet; but this has more commonly occurred when the dyſentery after the meaſles has been rather ſlight, and the diſcharge inconſiderable. And as the inteſtinal parts are in general much debilitated after the ſtomach and bowels have been ſo violently affected, and loſs of appetite, indigeſtion, and wind, are the natural conſequences, bitter infuſions with aromatics may be uſed with great advantage.

When a diſcharge of blood from the womb of a pregnant woman is brought on by the violence of the griping pains, and the bearing down to ſtool, bleeding will be proper, if the patient is of a full, ſanguine, or florid habit, but not otherwiſe; and after that evacuation, it will be neceſſary to attempt removing as much as poſſible the irritating cauſe by a mild doſe of manna and ſweet oil, to quiet the ſpaſmodic pains by conſiderable quantities of opium frequently adminiſtered, and to defend the gut from the acrimony of the voided matter by clyſters of ſtarch with liquid laudanum: however, abortion frequently follows, in ſpite of every precaution, and this alſo ſometimes happens without any previous hæmorrhage.

After the dyſentery has ceaſed, it is frequently ſucceeded by a ſlow diſcharge or oozing of blood from the pudenda, which ſometimes ſtops, and then returns again without producing abortion; in theſe caſes, if the opiates fail, the following medicines may probably be given with ſucceſs.

Take of Peruvian bark bruiſed, one ounce and half—of calcined vitriol, half a dram.

Infuſe forty-eight hours in a quart of cold water; pour or ſtrain it off fine, and give a ſpoonful or two of the infuſion, according to circumſtances, three or four times a day.

Or, take of Peruvian bark powdered, one ounce. Boil it in two quarts of water; then add half a dram of calcined vitriol, let it boil a minute longer, take it off the fire, and when it is cold ſtrain or filter it carefully. Of this add one ſpoonful to three of common decoction or infuſion of the bark, or of pure water, and adminiſter two, three, or four times a day.

During the whole courſe of the dyſentery which follows the meaſles, the regimen ſhould differ in ſome reſpects from that which is obſerved during the continuance of the eruptive diſeaſe; in particular the body muſt be kept warm, and eſpecially in bed, in order to promote a paſſage of the vitiated humours by perſpiration, and to prevent their flowing with ſuch impetuoſity to the inteſtines: the food in both ſtages of the diſtemper ſhould be mild and light, but ſomewhat nouriſhing, ſuch as thin broths of young animal fleſh, flour with milk, rice boiled, rice gruel, or the like.

Great care and attention is neceſſary with reſpect to the article of cleanlineſs; where numbers are ſick together, which is frequently the caſe with negro ſlaves, the diſeaſe in all ſtages will generally be much aggravated, and even the nurſes and medical attendants have been affected by the dyſentery: this has been attributed, and probably with reaſon, to the effluvia of the excrements, which are peculiarly offenſive; they ſhould, therefore, be conſtantly covered with earth as ſoon as they are diſcharged, and as the ſick are generally diſinclined to motion of any kind, a healthy ſlave or two ſhould be employed in this buſineſs.

Under the management and treatment which we have preſcribed, this diſeaſe is in general more alarming than fatal; great numbers are reduced very low by it, but far the greater part recover, even when their ſituations appear to be dangerous; yet it is unſafe to relax in the ſmalleſt degree from the neceſſary regulations; the changes of the diſeaſe muſt be watched, and the remedies applied in the ſeveral ſtages with ſome ſort of accuracy.

Beſides the conſequences of the meaſles which we have mentioned, there are alſo ſome others, which though they occur but ſeldom, ſhould be noticed in this general account of the diſeaſe and it's effects.

In conſequence of a cold taken, either by night expoſure, or by being wetted to the ſkin, a *tetanus* or locked jaw ſometimes ſeizes the patient ſoon after the ceſſation of the dyſentery; but this may in general be removed by opiates, frequently adminiſtered and perſiſted in, for it will not in general yield in many days, or in ſome inſtances wholly diſappear under weeks; from ten to twenty drops of liquid laudanum may in theſe caſes be given every four, three, or even two hours, according to circumſtances.

Dropſies are by no means uncommon diſorders after the meaſles; generous food, the bark, and chalybeats, are in moſt caſes effectual for the relief of every ſymptom of this kind.

The lungs of children are frequently affected after this diſeaſe; the firſt complaint is a dry cough, and this is ſoon joined by an intermittingfever, with daily paroxiſms; and though this fever ſometimes ceaſes for a week, yet it generally returns again: in this ſituation the lungs appearing rather to be affected by obſtructions than ulcerations, the patient waſtes away, and death approaches without any violent or acute ſymptoms.

In this caſe the bark is by no means adviſeable, and therefore this fever, which is of the hectic kind, ſhould be carefully diſtinguiſhed from the ordinary intermittent; and the free uſe of the lancet, conſulting the habit and conſtitution of the patient, with the neutral ſalts, accompanied with frequent draughts of diluting liquors, and a low diet, are the means to be applied for relief, inſtead of the quantities of bark abſolutely neceſſary in moſt inflammatory diſorders in this country, where it may be given freely even in pleuriſies and peripneumonies, provided it be accompanied with bleeding to ſuch an extent as may appear conſiſtent with ſafety and prudence.

CHAP. VII.

Of the Dyſentery of the Weſt Indies.

THIS diſorder is ſo frequent in theſe warm climates, that it may be truly ſaid to be endemial, and it is epidemical in a greater or leſs degree every year: the firſt two or three of the hotter months are ſucceeded by rains, which fall in very conſiderable quantities in the months of Auguſt and September, and continuing ſometimes for many days ſucceſſively, are followed by two or three days of fair weather, and then rain again, and ſo alternately for a conſiderable length of time; this fall of rain, in proportion to the quantity, renders the air cold, damp, and moiſt, as long as the weather continues cloudy, but the breaking forth of the ſun brings on a return of extreme heat, and this often happens not only in the months of Auguſt and September, but in October, theſe being generally the hotteſt months in the year, though the heat is frequently interrupted in the manner juſt mentioned.

Theſe great and violent changes of the air are uſually productive of dyſenteries, which commonly become epidemical among the white people, but more particularly affect the negroes, who are in general ill cloathed, and are expoſed to the inclemencies of theſe ſhifting and varying ſeaſons; and it has been a remark, confirmed by repeated obſervations, that if the months of May, June, July, and Auguſt, are very hot and dry, and the three following months are ſo rainy that the air is at times rendered cool and moiſt, with intermediate dry days between the falls of rain, dyſenteries were very frequent and epidemical, and that this diſorder rages with a malignancy proportioned to the more ſudden or gradual changes of the air and weather, and to the longer and ſhorter duration of this inconſtant ſeaſon; but as the rainy or variable months differ ſomewhat in different iſlands of the Weſt Indies, ſo the times we have fixed will not correſpond with all, though the effect is nearly ſimilar.

This diſorder may be occaſioned by various cauſes; the heat and great drought of the air may ſo act on the fluids of the human body, as to render them acrid and unfit to perform the functions of life, and the moſt ſenſible parts of the frame may be ſo ſtimulated and irritated by this acrimony, as to act with violence againſt the ordinary operations of Nature; and as her efforts are always exerted in endeavours to throw off whatever is noxious and offenſive by the paſſages of the ſkin, the heats are favourable to perſpiration; but this diſcharge being ſtopped by the fall of the rain and the conſequential coolneſs and moiſture of the air, theſe acrid humours are diverted to the bowels, where they act as ſtimulants and irritatives, excite fever and inflammation, which contribute to the production of more matter, and of conſequence to the increaſe of the inteſtinal diſorder, which at length is accompanied with teneſmus, violent pain, and other bad ſymptoms, and which being ſuffered to proceed without interruption, form obſtructions, occaſion a ſuffocation of the blood-veſſels, a mortification of the inteſtines, and ſpeedy diſſolution.

And as, though dyſenteries are always epidemical in the Weſt-India Iſlands during the rainy ſeaſon, they are not always equally malignant, but the meaſure of the prevailing violence is according to the ſeaſon; this may be conſidered as the cauſe of this diſorder, or rather of it's firſt breaking out.

For it is by no means improbable, that it is alſo ſometimes produced by infectious particles, which being exhaled from the bodies of thoſe who are diſeaſed, float in the air, and being received into the mouth with the breath, adhere to the ſaliva, and are conveyed into the ſtomach and bowels, where they generate this diſorder, when the conſtitution is in a fit ſtate to receive the infection: but this only happens when the diſeaſe has continued a conſiderable length of time, when many are ill of it together, and the humours becoming putrid and acrid, infectious effluvia are carried by the air, not only from the bodies, but from the excrements of the diſeaſed, and thus the diſorder being communicated to the healthy, it becomes both epidemical and contagious at the ſame time, though it's commencement was of the former kind.

This diſorder firſt ſeizes thoſe who are poorly fed and cloathed, and who are unprotected from the viciſſitudes of the ſeaſons; ſo that it is very often fatal among the negroes, when few or none of the whites are afflicted with it: however, after it ſpreads among the ſlaves and becomes infectious, thoſe who are in more comfortable ſituations are by no means exempt from it's influence.

This diſeaſe does not always attack in the ſame way: in ſome inſtances the patients are ſeized with a diarrhœa, which after continuing rather moderate for a day or two, increaſes by degrees till it becomes a direct dyſentery, accompanied with all the uſual ſymptoms of that diſorder.

In other caſes it approaches with a nauſea and ſickneſs at the ſtomach; ſlight ſhiverings, pains in the head, and ſometimes in the limbs and over the whole body; and theſe are ſpeedily ſucceeded by a fever, pains and gripings in the bowels, and painful ſtools: the ſickneſs at the ſtomach increaſing, is attended with a diſpoſition or retching to vomit, and ſometimes with diſcharges that way; as the fever advances, the pulſe becomes extremely quick, and is frequently ſtrong and hard, though not in general ſo full as in many other fevers; the internal heat is extreme, but the external ſurface of the body is leſs affected by it; as the evacuations grow more frequent, the griping pains increaſe, and the excrement diſcharged appears to be mixed with much mucus or ſlime of the guts, and a very conſiderable portion of blood; ſome of the ſtools contain only this mucus and blood, without any apparent mixture of excrement, and others ſeem to conſiſt of a thin watery matter only, like the brine in which beef has been ſalted; and when ſuch is the ſtate of the diſcharges, they are accompanied with a continual and painful inclination to go to ſtool. If theſe ſymptoms continue unrelieved, if the fever increaſes the pulſe grows more quick, the internal heat is augmented and accompanied with thirſt, though the external heat ſtill continues below the uſual ſtate of other fevers, which may be accounted for by the flux of all the humours to the bowels; the patient's ſtrength fails, a delirium ſeizes him, his extremities grow cold, the pulſe becomes irregular, unequal, and intermitting, cold and clammy ſweats come on the ſtools paſs away involuntarily and ſometimes inſenſibly, ſpaſms in the ſtomach or hiccups add to the patient's miſeries; and, as the coldneſs of the extreme parts, the ſweats, and all the other ſymptoms, become more violent,

lent; the patient is ſeized with faintneſs, which is a prelude to mortification of the bowels, after which all hope is at an end.

The firſt endeavour muſt be to abate the fever, and carry off the offending matter; after which attempts muſt be made to check the diſcharge, to heal the corroded and inflamed inteſtines, and to reſtore their tones ſo that they may exerciſe their proper functions.

For theſe purpoſes bleeding is firſt neceſſary, but the quantity of blood to be taken away muſt be determined by the feveriſh ſymptoms, and depend entirely on the quickneſs, hardneſs, and fullneſs of the patient's pulſe, his ſtrength, and other circumſtances; and this evacuation will conduce to leſſen the inflammation and lower the feveriſh heat, as well as to check the acrimony of the humours, and their tendency to putrefaction.

After the bleeding, an emetic may be given to relieve the ſickneſs, retching, and vomiting, and the earlier this is adminiſtered the more advantageous it will prove, not only in carrying off a part of the offending humours and infectious matter, but alſo to remove them from the bowels by revulſion, and clear the ſtomach to make way for the operation of the future medicines; the beſt emetic in this caſe is the powder of ipecacuanha, being ſafe in it's operation, and acting afterwards as a gentle aſtringent on the bowels.

The effect of the vomit muſt alſo be aſſiſted with ſuch medicines as will contribute to carry off the diſeaſed matter in the beginning of the diſorder, alleviate the ſeverity of the pain, and abate the flux; to this end—

Take of rhubarb toaſted and powdered, one ſcruple—of electuary of ſcordium, or water germander, half a dram—of opium, from one grain to two—of oil of cinnamon, one drop—ſyrup of poppies, as much as will make theſe ingredients into a bolus. To be taken an hour after the operation of the emetic.

If, by the help of the evacuations and theſe medicines, a conſiderable abatement of the fever and purging can be procured, as is frequently the caſe when the diſorder is attacked in it's earlieſt ſtate, before it has had time to gain much ground, the following medicine is recommended as efficacious in the removal of the remaining fever, as well as in checking the flux and healing the bowels, and is ſaid, with the addition of a proper regimen, to have ſometimes effected a cure without the aſſiſtance of other medical help.

Take the Barbadoes reſtringent bark, (being the bark of the baſtard *locus*) and miſletoe of the lemon tree, of each one ounce—of the bark of pomgranate, half an ounce—of cinnamon, one ounce and half. Boil theſe in a quart of water till it is reduced to a pint and half; towards the end of the boiling add one ounce of the electuary of ſcordium, and boil it again for a few minutes, and ſtrain it off. Add to the decoction, of tincture of Japan earth, one ounce—of the ſweet ſpirit of nitre, half an ounce—of purified nitre, half an ounce—of ſyrup of poppies, one ounce. Mix the whole together, and give three or four ſpoonfuls every three hours, or after every conſiderable evacuation by ſtool. The quantity of nitre and of the opiate may be increaſed or leſſened if it ſhould appear neceſſary; and where the Barbadoes bark cannot be had, the Peruvian bark may be ſubſtituted.

As the nitre is known rather to looſen the belly than to reſtrain, it may be neceſſary to obſerve, that however violent the diſcharge may be by purging, yet the danger ſeldom ariſes from this ſymptom, but that the violence of the fever and the inflammation of the inteſtines bring on a mortification in theſe warm climates which proves mortal; the fever and inflammatory diſpoſition ſhould be leſſened or taken off, before any attempts ſhould be made to ſtop or check the diſcharge, and if ſtrongly aſtringent or heating cordial medicines are adminiſtered for this purpoſe, they only ſerve to add to the violence of the fever, and increaſe the other ſymptoms to ſuch a degree, as to put a ſpeedy end to the patient's life; the ſafeſt courſe is to get rid of the fever and inflammation by bleeding and anti-inflammatory medicines, joined with very gentle cooling reſtringents, and ſuch opiates as may afford eaſe to the patient by leſſening the irritation of the bowels: nitre may be alſo given for the purpoſe of cooling the inflammatory heat of the inteſtines, in a bolus, with electuary of ſcordium or Locatelli's balſam.

To children, when the ſtools are frequent and bloody, and voided with conſiderable pain, after the bleeding, an emetic, and a ſmall doſe of toaſted rhubarb, nitre may be given with a little red coral in an anodyne julep, with powder of crabs claws or of calcined oyſter-ſhells; and many inſtances have occurred, in which, by the aſſiſtance of theſe medicines only, the inflammation and fever have been ſubdued, the purging ſtopped, and happy recoveries have taken place; for if thoſe ſymptoms can be got the better of, the frequency of the ſtools ſoon abates, and the quality of them changes advantageouſly; or if the bowels ſhould be ſo weakened and relaxed that the diſcharge continues, an anodyne moderately reſtringent, and a clyſter, will generally reduce it within bounds.

If, after the bleeding, the emetic and the uſe of the ſeveral medicines above preſcribed, the fever ſhould ſtill continue, and the frequency of the bloody ſtools, together with the pain which uſually attends them, remain ſtill unabated, the bleeding muſt be repeated, and even a ſecond time, if the fulneſs and hardneſs of the pulſe and the urgency of the other ſymptoms demand it, and the ſtrength of the patient will bear it; from whence alſo a judgment muſt be formed as to the quantity of blood neceſſary to be taken away: after this the ipecacuanha ſhould alſo be given again; from two grains to five may be mixed with a ſcruple of Venice treacle, and after a day or two, if it continues to excite vomiting, it may be accompanied with a gentle anodyne; and between the doſes of ipecacuanha, the reſtringent decoction already mentioned may be taken, if the ſtools continue frequent, and by this courſe great hopes may be entertained of a ſafe and ſpeedy cure.

And when the fever and inflammation continue obſtinate, notwithſtanding the ſeveral evacuations of bleeding and vomiting, and the adminiſtration of the medicines which we have preſcribed, and the patient is reduced too low to bear farther evacuations; when the pulſe ſinks, though it ſtill continues quick; when the delirium remains, the ſkin is hot and dry, and the bloody or brine-like ſtools are ſtill frequently repeated; the ipecacuanha powder, given in ſmall doſes of two or three grains every three hours, till the patient has taken four doſes, and making the laſt doſe of double the quantity, will in many caſes, after exciting a gentle vomiting, have a ſurprizing effect in reſtraining the thirſt, and bring on a free and genial perſpiration over the whole body, this operation of the medicine being properly promoted by frequent draughts of ſmall diluting liquids; and after this criſis the delirium, together with all the other diſagreeable ſymptoms, have gone off by degrees, and the patient's recovery has proceeded happily with the aſſiſtance of a few doſes of ſome reſtringent perſpirative opiate.

The painful griping and ſoreneſs of the bowels are other diſagreeable circumſtances which commonly attend this diſeaſe, and ariſe from the great and acrimonious heat of the humours; and the fine ſoft jelly or ſlime which ſheaths and defends the inteſtines, being carried off by the continual motion of the matter downwards, the guts are irritated, inflamed, and in part excoriated, and even pieces of the thin membrane which lines the guts, an inch or two long, are in ſome inſtances brought away with the ſtools, ſo that the inteſtines become ſore and painful in a very great degree.

When theſe complaints are ſeated pretty high up in the guts, the following electuary is recommended.

> Take electuary of ſcordium, and Locatelli's balſam, of each one ounce—ſpermaceti, and powder of bole, with opium, of each one dram and half—balſamic ſyrup, as much as will make the whole into a ſmooth electuary; of which the quantity of a nutmeg may be taken every fourth or fifth hour, drinking after it two or three ſpoonfuls of an emulſion with wax.

But if the pain and ſoreneſs ſhould be towards the lower part of the belly, approaching to the extremity of the rectum, it is in all probability occaſioned by excoriations, or by little ulcerations of that gut, which being irritated by the ſharpneſs of the paſſing humours, produce a conſtant and painful *teneſmus*, or bearing down to ſtool.

In theſe caſes, in addition to the medicines above preſcribed, healing balſamic clyſters ſhould be frequently injected, and theſe ſhould be compoſed of fat broths or milk, with wax, ſpermaceti, and anodynes. The following may anſwer the purpoſe better than moſt others.

> Take of fat broth of mutton or veal, from eight to ten ounces—Locatelli's balſam, ſpermaceti, and white wax, of each half an ounce—of electuary of ſcordium or Venice treacle, one dram and half—or, inſtead of either of the latter ingredients, from thirty to forty drops of liquid laudanum.

When the diſeaſe has been ſevere and of long continuance, and when the pain and ſoreneſs are ſituated in the lower part of the belly, it very often ariſes from hardened fæces or excrement, which being formed into round pellets or balls by the convulſive ſpaſms of the guts, are baked by the feveriſh heat which attends this diſeaſe to a wonderful degree of hardneſs, and are ſometimes of conſiderable ſize, when towards the cloſe of the diſeaſe they are evacuated, ſo that it is aſtoniſhing to find ſuch hard lumps remaining in the guts during the whole continuance of a violent liquid purging, without being either waſted or carried away entire by it; as long as theſe hard lumps remain in the inteſtines, they muſt unqueſtionably irritate and ſtimulate them in the excoriated and tender ſtate to which they have been reduced by the conſtant acrimonious diſcharge, and therefore the teneſmus will continue till they can be brought off: for this purpoſe, proper purgatives and clyſters muſt be adminiſtered; the former may conſiſt of ſmall quantities of manna and rhubarb, with a dram or two of ſal polychreſtum and a little ſweet oil. The following form may ſerve for the clyſters.

> Take of warm water, from eight to ten ounces—of ſweet oil, half an ounce—of honey, two drams—of Spaniſh ſoap, one ſcruple.

After theſe hardened fæces have been expelled by ſuch treatment, the uſe of the before mentioned balſamic and healing medicines generally compleats the cure; the clyſters muſt be repeated till they produce the deſired effect.

The regimen during the continuance of the feveriſh and inflammatory ſymptoms muſt be low; after theſe are removed, the food may be more nouriſhing, but ſtill continue to be light; and in the decline of the diſorder, good broths, jellies, ſago, ſalop, and ſuch like gelatinous ſpoon-meats, will aſſiſt in healing the inteſtines, as well as in the reſtoration of the patient's ſtrength: whatever heats or ſtimulates muſt be carefully avoided, not only during the courſe of the diſeaſe, but for ſome time after it's total removal, as a relapſe is frequently more fatal than the original diſeaſe; and for the ſame reaſon, the patient ſhould for ſome time after he goes abroad be particularly attentive neither to indulge in exceſs or intemperance of any kind, nor to expoſe himſelf to cold, night air, or the hazard of getting wet, and eſpecially in the feet: violent exerciſe of any kind may alſo be highly injurious, nor ſhould the patient return to his accuſtomed diet in food and liquors without much caution; even among the ſlaves it is the intereſt of their proprietors to attend to theſe articles, though we ſhould hope it is unneceſſary to urge any other motives than thoſe of humanity, to leſſen the wretchedneſs of thoſe who have no other hope of alleviation to their miſeries, than in the mildneſs and benevolence of the maſters they are deſtined to ſerve.

CHAP. VIII.

Of the Opiſthotonos, and Tetanus, in the Weſt Indies.

THESE diſeaſes, though little known in England or other northern climates, yet are ſo frequently ſeen in the Weſt India iſlands and the neighbouring continent, that they may be ſaid to be indigenous or endemial in thoſe countries which are within or near the torrid zone. The Greeks diſtinguiſhed theſe diſorders, as we have already obſerved in a former part of this work, into three different kinds: the firſt they called *emproſthotonos*, in which the body was forcibly drawn or bent forwards or downwards; the ſecond *opiſthotonos*, when it was bent or forced backward in a curved poſition, and ſo remained immoveable; and the third, when the body was rigidly and immovably fixed in an erect poſture like a ſtatue, or when any particular limb was ſo affected, they called a *tetanus*. The firſt ſeldom appears; the two others very frequently in theſe warm climates.

And though theſe diſorders have been thus divided, yet are they properly but one diſeaſe, ariſing generally from nearly, if not exactly, the ſame cauſes, and differing only in the different poſitions to which the body is reduced by them.

The cauſes which produce this diſeaſe are in general three, which differ widely from each other, though in particular caſes and conſtitutions ſome other cauſes may concur. The firſt cauſe is any ſmall or ſlight prick or puncture of pin, needle, nail, fiſh-bone, thorn, or ſplinter of wood, accidentally received into the head, hand, finger, foot, toe, or ſome other nervous part of the human body; from the ligatures on the arteries (in which it is probable a nerve may be included) after the amputation of a limb; or from a ſcratch or cut of a ſtone, though it appears to be barely ſkin-deep. It appears almoſt incredible, that cauſes ſo trifling as thoſe of ſuch punctures or ſcratches ſhould occaſion ſymptoms ſo violent, and that too in parts of the body remote from thoſe which have ſuffered the injury; yet the fatal effects of this diſeaſe are but too often felt.

The ſecond cauſe of this diſeaſe may be a cold taken by a ſudden expoſure of the body to a current of cool air, when it is heated by exerciſe or in a profuſe ſweat; going into cold water in the ſame condition, or receiving ſuch a ſhower of rain as may wet the cloaths to the ſkin, when the body is in like manner warm or in a ſtate of perſpiration.

The laſt cauſe we ſhall mention, is the retention of the *meconium* in the bowels of infants, or the taking any ſuch matter into the ſtomach, as is either of an acrid quality, or diſpoſed to be converted to a hard curd.

From either of theſe cauſes may this diſorder proceed; the effects of each are very nearly ſimilar, though the approach of the diſeaſe is at different periods from the firſt occurrence of the cauſe.

When it proceeds from wounds or external injuries, it generally comes on between the tenth and fourteenth day after the prick or ſcratch hath been received, and ſometimes, but very ſeldom, a day or two earlier; and it frequently comes on when the injury itſelf hath neither given the patient pain or uneaſineſs, nor has aſſumed any bad appearance, but has digeſted, looked well, and in many inſtances been perfectly healed up by common applications, and has remained ſo totally without inconvenience, that the circumſtance hath been almoſt forgotten before thoſe ſymptoms have appeared which we ſhall deſcribe hereafter.

When the diſorder proceeds from the ſecond cauſe, and a ſudden cold hath been the occaſion of it, the patient generally feels the common ſymptoms of a cold for the firſt four or five days, about which time, when a fever of the inflammatory kind might be expected to appear, he is attacked by the uſual ſigns of this diſeaſe.

When, from either of the cauſes we have mentioned, children are the ſubjects of this diſorder, it generally approaches within three or four days, and ſometimes ſooner.

The firſt complaints are generally an uneaſy ſenſation and a little tightneſs on the breaſt; ſtiffneſs of the jaws, which increaſing by degrees, produces a difficulty of ſwallowing, though the throat does not appear to be ſwelled either internally or externally; a pain is felt all down the ſpine of the back, with a contraction and ſtraitneſs of the muſcles in that part of the body; this is ſoon followed by the like contraction of the neck, which alſo continues to increaſe for a day or two, and then the neck, head, and back-bone, are forcibly but gradually bent backwards, and the body remains firmly fixed in that unnatural poſture; the jaws are now locked cloſe, and immoveably fixed, and about the third or fourth day, or ſometimes ſooner, an incapability comes on of ſwallowing any liquid that can be got into the mouth; at this time alſo the patient is afflicted with ſtrong convulſive ſpaſms, firſt beneath the breaſt-bone and at the ſides, but ſoon extending to the neck, jaws, and whole ſpinal marrow, and repeated frequently with ſuch agonies of pain, and with ſuch force and violence, as ſometimes to raiſe the whole body from the bed with a ſudden jerk or twitch to a height almoſt incredible, and at other times drawing up the middle of the body in a kind of arch, leaving the heels and the back part of the head only on the place where it has laid; or, if the patient ſhould endeavour to lay on his face, bringing his head and heels ſo near together, as almoſt to form a circle; but this laſt poſture can hardly be endured, unleſs, as it ſometimes happens, the legs are free from the contraction, and are only extended ſtrongly and rigidly, but remain ſtraight.

As the diſeaſe gains ground, theſe ſpaſms or convulſions become more frequent, and the violence of them is proportionably increaſed, returning every ten minutes or quarter of an hour, and reducing the patient to the moſt extreme miſery by the inexpreſſible torment of the pain, augmented by the dread and horror of the returns of the paroxiſms, of which the unfortunate ſufferer is in momentary expectation.

As the diſeaſe is now become a compleat *tetanus*, the patient lies in a rigid immoveable ſtate in the intervals between the ſpaſms, the only remaining powers of motion being in the tongue and fingers, the patient neither being deprived of his ſpeech, nor abſolutely prevented from aſſiſting himſelf with his hands, though his arms are fixed and uſeleſs.

This diſeaſe is wholly unattended with fever when it proceeds from any wound or puncture; the pulſe is generally perfectly regular, though ſomewhat ſlower, ſmaller, and a little harder than uſual; the heat of the body nearly as in perfect health, and the breath as free and eaſy, except immediately before the approach of the ſpaſms, during their continuance, and a ſhort time after the remiſſion of them, when it is generally ſhort, quick, and agitated; the pulſe at the ſame time being ſomewhat interrupted and irregular for a few minutes, but ſoon gradually ſubſiding and becoming regular, and the breathing reſumes as ſpeedily it's accuſtomed freedom.

The body is ſometimes thrown into a profuſe ſweat by the violence of the pain; yet, as we have before obſerved, it is unaccompanied with fever or heat; nor is the thirſt urgent, or the tongue remarkably foul, though it is frequently ſtiff and in a kind of torpid ſtate, occaſioned by the contraction of the muſcles; the urine is leſſened in quantity, owing to the inability of ſwallowing, but it's appearance is no otherwiſe altered, than by being ſomewhat heightened in colour; the body is generally coſtive, the belly drawn inward or flat, and all the muſcles of that part, as well as the other parts of the body, affected with rigidity, ſtiffneſs, and contraction.

The patient's ſleep either wholly forſakes him, or if he falls into ſlumbers, they are interrupted by the ſpaſms or convulſions, and that ſo frequently, in the aggravated ſtate of the diſeaſe, that he remains almoſt wholly without reſt; the countenance is diſtorted, languid, pale, and ſtrongly expreſſive of anguiſh and diſtreſs; and the returns of the convulſions continuing to grow more frequent and violent till they become univerſal, the unhappy victim expires in ſome general ſhock, in moſt caſes retaining his ſenſes to the laſt moment.

The ſtate of this diſeaſe which we have deſcribed is ſuch as occurs when the ſymptoms approach gradually, and increaſe in violence by degrees; and in theſe caſes it may continue to grow worſe till the ſixth, ſeventh, and in ſome inſtances to the tenth or eleventh day; but when the diſeaſe in it's firſt attack is accompanied with greater violence of the ſymptoms, or they increaſe more rapidly and return more frequently, ſix, five, nay, even four days, ſometimes put a period to the patient's life, if the fatal effects of the diſorder are not prevented by timely and ſucceſsful preſcriptions: if the patient ſurvives the tenth day, great hope may be entertained of his perfect recovery, though it is ſeveral weeks, frequently four, five, or ſix, before the perfect tone of the nerves is reſtored, and the compleat uſe of the muſcles.

When this diſorder ariſes from a cold, the ſame ſymptoms appear as we have already deſcribed; but they generally approach ſooner after the cauſe has occurred, than when they are the conſequences of a puncture or wound: for the firſt three or four days they are alſo unaccompanied with fever, though the pulſe is rather more full and hard, but very little quicker, during this ſtage of the diſorder; but after the fourth or fifth day, the quickneſs of the pulſe is perceivably increaſed, with an additional fulneſs and hardneſs, and a fever comes on, attended with ſome inflammatory ſymptoms which ſeem to require bleeding; a delirium ſometimes alſo approaches, and continues with intervals; the blood which is drawn is more florid and thick than in the former caſe, where it is uſually of a lax conſiſtence and looſe texture, much leſs florid, and in ſome caſes mixed with dark ſpots; the thirſt is alſo generally more urgent; but in all other reſpects the acceſs, progreſs, and ſymptoms of this diſeaſe, when occaſioned by a cold, are the ſame as when it proceeds from external injuries, and the effects of it rather more fatal in this caſe than the other.

When this diſorder ſeizes infants, the

ſymptoms are nearly the ſame, only that the convulſions generally come on much earlier, as well as the contractions and rigidity: more or leſs of a fever generally attends this diſeaſe in children; and common convulſions, or epileptic fits, in theſe young ſubjects, if they continue any length of time, are frequently changed into a tetanus in theſe hot climates.

Negroes are ſaid to be more ſubject to this diſeaſe than whites; but perhaps this obſervation ariſes from the former being more expoſed to accidental injuries than the latter, by going bare-foot and generally ill cloathed, and from the nature of their labour and occupations, which renders them liable to cuts, ſcratches, and punctures: they are alſo accuſtomed to throw themſelves into water when they are ſweating with labour or exerciſe, and ſo run the hazard of getting colds by this ſudden obſtruction. White people are however much more frequently attacked by this diſorder in warm than in cold climates.

That ſuch trifling cauſes ſhould produce ſuch violent and frequently fatal effects is aſtoniſhing; nor has any clear or ſatisfactory reaſon been aſſigned for it: obſervation has convinced us, that there is ſuch a thing as conſent of parts, and that injuries or irritations in one part of the body will frequently affect another unhurt part in the ſame manner; as any foreign body ſettling accidentally into one eye produces diſorder in both, and one kidney being inflamed or irritated by the formation or paſſage of a ſtone, the other ſympathizes in pain and other ſymptoms; and inſtances have been met with, where a particular nerve being lacerated or irritated, the whole nervous ſyſtem has been ſo affected, as to bring on epileptic fits and convulſive ſpaſms throughout the whole body, and upon the removal of the cauſe the fits have ceaſed, and the patient has ſuffered no farther inconvenience; and that ſome ſuch conſent may occaſion this diſorder is probable, becauſe where it has been violent the patient has been often relieved by dividing the nerve ſomewhat above the wound, ſoon after which operation the convulſive ſpaſms have abated, and the cure has appeared to be very conſiderably forwarded by it.

Under this idea, then, our endeavours muſt be exerted to remove the cauſe by which the nerves are affected, and to leſſen the ſtimulation and irritation which it has occaſioned; and, when this is done, to procure a relaxation of the rigidity and contraction of the nervous, muſcular, and tendinous ſyſtems.

As ſoon as any of the ſymptoms which threaten a tetanus appear, the wound or puncture, however inconſiderable, ſhould be carefully examined, to diſcover if any part of the inſtrument with which it was inflicted, whether pin, needle, nail, bone, thorn, or ſplinter, remains in it; in which caſe it muſt be taken away with a tender hand, to avoid as much as poſſible the laceration of a nerve, and in order to leſſen the ſenſe of irritation of that which has already ſuffered, and to prevent the communication of the effects of the injury to the other nerves, or the ſyſtem generally: an inciſion may be made juſt above the wound or puncture, of a depth ſufficient to divide the wounded nerve in two, and the conveyance from that nerve to the reſt being thus effectually interrupted, both wounds may be dreſſed with ſome mild digeſtive ointment, in which an opiate may be mixed to leſſen the irritation and aſſwage the violence of the pain.

After this operation, the following medicines may be given.

Take of muſk, from eight grains to twelve—of opium, from one grain to three—of Venice treacle, one ſcruple—of balſam of Peru, as much as will make a bolus, which may be adminiſtered immediately.

Or, take of ſimple alexiterial water, one ounce and half—of compound ſpirit of lavender, one dram—of ſpirit of hartſhorn, thirty drops,

> drops—of muſk, eight grains—of opium, two grains—of balſam of Peru, twenty drops—of ſyrup of poppies, half an ounce. Make a draught, to be taken as before.
>
> Or, take of opium, from two grains to three—of muſk, from eight grains to ten—of balſam of Peru, enough to make theſe ingredients into four pills. To be taken at once.

One of theſe medicines muſt be repeated at ſuch diſtances as the greater or leſs violence of the convulſive ſpaſms may direct; if they are ſtrong and frequent, it may be neceſſary to adminiſter a medicine every ſix or eight hours; if their approaches are more diſtant, and the ſymptoms leſs ſevere, an interval of ten or twelve hours may be allowed between each doſe; but where the diſorder appears in it's moſt aggravated ſtate, it may be neceſſary to repeat even oftener than every ſixth hour.

Nor is any danger to be apprehended from giving ſuch large quantities of opium in this diſeaſe, even though the patient has been before wholly unaccuſtomed to any preparations of the anodyne kind; far from occaſioning a ſtupor or heavineſs, where the paroxiſms are ſtrong and the returns of the convulſions quick, the largeſt doſes of opiates ſeldom even produce any great diſpoſition to ſleep, and from ſixteen to twenty grains of opium have actually been given within twenty-four hours, which have hardly procured three hours ſleep in the whole ſpace, and that at different times in the intervals between the ſpaſms, which in ſpite of the opiate have generally rouzed the patient before he had enjoyed an hour's reſt; and even the quantities laſt mentioned have occaſioned no ſubſequent ſtupidity, ſleepineſs, or confuſion of the faculties, but the patient hath appeared, during the intervals of comparative eaſe, to be as totally unaffected by theſe medicines, as if he had not taken them.

Yet opiates ſeldom fail to leſſen and abate, as well the convulſive ſpaſms as the rigidity and contraction, and with the addition of muſk, as before preſcribed, are in general effectual to remove this moſt painful and dreaded diſorder. As the violence of the convulſions abates, and the ſpaſms are leſs frequent, the intervals between adminiſtering the doſes of opium and muſk may be gradually prolonged, till the ſpaſms ceaſe wholly, or the patient's limbs are ſo far relaxed that he can move them and help himſelf; nor ſhould theſe medicines be wholly omitted till every ſymptom of the diſeaſe hath totally diſappeared.

But an emollient and relaxing fomentation, uſed three or four times a day in bathing the breaſt, ſtomach, jaws, neck, and ſpine of the back, will be found of conſiderable ſervice towards removing the painful ſymptoms, and relieving the rigid contraction of the nerves, muſcles, and tendons, of the affected parts: for this purpoſe—

> Take the leaves of althœa, four handfuls—ſage and elder, of each two handfuls—of bruiſed linſeed, two ounces—of Venetian ſoap, two ounces—of crude ſal ammoniac, one ounce. Boil theſe ingredients a quarter of an hour in one gallon of water; then add of oil of Barbadoes tar, three ounces, diſſolved in a pint of common rum—of Venice treacle, two ounces. Mix the whole well together, and make a fomentation. Apply flannels wrung out of it moderately warm to the breaſt, neck, and ſpine of the back, every ſix hours.

After every fomentation, let the parts affected be gently rubbed with the following ointment, and covered with flannel.

> Take of the ſaponaceous volatile liniment, one ounce—of balſam of Peru, two drams—oil of lavender and roſemary, of each twenty drops—of opium, one dram. Make a liniment, to be uſed as above.

The warm bath hath been alſo recommended; but whether the relaxation is too ſudden or general, or the water brings on too violent a perſpiration, certain it is, that patients have been frequently known to expire ſoon after their being taken out of the bath: from fomentation and partial bathing no ſuch fatal conſequences have ever happened, and it is therefore adviſed as a meaſure more ſafe and equally ſalutary.

But as in this diſeaſe the pulſe is generally languid, low, and ſmall, except, as we have before remarked, immediately before and after the ſpaſms and during the continuance of them, when it is quick and irregular, though in general it ſtill continues ſmall, and ſoon becomes ſlow again, and the patient is more frequently cool than warm, and his extremities in particular cold and covered with a cold and clammy ſweat, ſome warming cordial medicines are therefore neceſſary, to increaſe and keep up the circulation of the fluids; a little warm wine and water may be given three or four times a day, or the following mixture when the patient is low, faint, or ſick.

Take ſimple mint water and ſimple alexiterial water, of each four ounces—of Madeira or Canary wine, four ounces—of compound ſpirit of lavender, half an ounce—tincture of caſtor, and volatile aromatic ſpirit, of each two drams—of ſyrup of poppies, one ounce. Mix all together, and give two or three ſpoonfuls on any particular failure of ſtrength or depreſſion of ſpirits.

To remove the coſtiveneſs which generally attends this diſeaſe, and which is augmented by the large and frequent doſes of opiates, which are abſolutely neceſſary to the patient's exiſtence as well as his recovery, the following relaxing emollient clyſter may be injected once in every twenty-four hours, or oftener if it ſhould be neceſſary.

Take of the common emollient decoction for clyſters, eight ounces—lenitive electuary, and oil of palma Chriſti, of each one ounce—of balſam of Peru, one dram. Mix for a clyſter.

Bleeding, purging, and other evacuations, are by no means ſerviceable; on the contrary, they are rather prejudical, unleſs the patient happens to be of a very full, ſanguine habit, or feveriſh, inflammatory, or pleuretic ſymptoms, have been brought on by bad treatment and hot ſtimulating medicines; in ſuch a caſe, one moderate bleeding, with the uſe of cooling medicines, continuing alſo the adminiſtration of the opium and muſk at proper intervals, may remove the inflammatory and convulſive ſymptoms together; however, the lancet ſhould be uſed with extreme caution in this diſeaſe, and particularly when it has been occaſioned by a puncture.

When this diſorder is occaſioned by a cold, as the ſymptoms are preciſely the ſame as thoſe which precede and accompany the diſeaſe that ariſes in conſequence of a wound or external injury, and differ only in the time when they firſt appear after the occurrence of the cauſe, ſo the ſame methods and treatment are proper in both, excepting only that in the caſe of which we now ſpeak no inciſion can be made; and as the perſpiration is diminiſhed or obſtructed by the ſudden cold to which this diſeaſe ſucceeds, the fluids being increaſed, a fever, commonly attended with ſome inflammatory ſymptoms, is produced, and it may be prudent to take ſome blood from the patient, the quantity of which muſt be determined by habit, conſtitution, and immediate circumſtances, and ſome cooling and anti-inflammatory medicines may alſo be neceſſary with the opiates and muſk.

The patient's recovery from this diſorder, incurred in the way laſt mentioned, generally takes place in ſeven or eight days, if the means we have preſcribed, and which appear to be the beſt which have been offered,

fered, prove ſucceſsful, though the perfect reſtoration of health is not accompliſhed more ſpeedily than in the former caſe, nor is the diſeaſe leſs fatal when it proceeds from a cold, than when the cauſe is a wound, ſcratch, or puncture; indeed, it moſt commonly proves mortal, if there is any delay in procuring or adminiſtering proper medicines.

The tetanus which affects children, is, as we have already ſhewn, of nearly the ſame nature, and produced by the ſame cauſes, as convulſion fits in England: the firſt excrement being retained in the bowels, or any matter afterwards conveyed into the inteſtines capable of being hardened to curd, or the milk being coagulated by an acid in the ſtomach, the tender bowels of the infant are irritated, and ſtartings and ſpaſms are produced, with the other ſymptoms which uſually uſher in and accompany convulſions in children; and, as much ſlighter cauſes produce more fatal conſequences in the warmer climates, where the nerves are readily and eaſily affected and irritated, ſo what occaſions convulſion fits in England, brings on a tetanus in the Weſt Indies.

This diſorder, when it attacks infants, firſt ſeizes them with violent gripings and ſpaſmodic pains in the bowels, then follow convulſive twitchings and regular convulſion fits, and laſt of all a perfect tetanus, from which a recovery is extremely doubtful; for when the poor, little, unfortunate ſufferer, lays in this rigid, contracted, and miſerable condition, the ſmalleſt and moſt gentle motion of it's hands and feet, or the ſofteſt touch of any part of it's body, or moving it in the ſmalleſt degree, if but to feel it's pulſe in the moſt tender way, even the diſturbance of the bed-cloaths, or the ſmalleſt noiſe, will immediately occaſion the convulſive ſpaſms, and cauſe it's little body either to be drawn backward in a curve, or extended in a ſtraight figure, fixed and immoveable, in which ſituation it will frequently remain a minute or two, when the rigidity will in ſome meaſure relax, and the limbs ſeem more at liberty, till the return of the fits, which ſometimes happen in ſo ſhort a ſpace of time, that eight or ten are repeated within the hour; and when the diſeaſe is arrived at this ſtate it is ſeldom or ever curable.

But on the firſt appearance of convulſions, aſſiſtance ſhould be procured, and means uſed to carry off the offending cauſe which ſtimulates and irritates the tender bowels of the infant, which may be done by ſuch gentle evacuations as are ſuited to the age; after which, the irritation of the nerves ſhould be quieted and allayed by proper anodynes, and the acidity in the ſtomach, and the acrimonious quality of the nutritious juices, corrected by fit abſorbents.

To anſwer theſe purpoſes—

Take of new milk whey, two ounces—of Venetian ſoap, one ſcruple—of fineſt manna, from two drams to three—of oil of ſweet almonds, half an ounce—of oil of ſweet fennel ſeeds, two drops—of balſam of Peru, five drops. Make a clyſter, and inject directly.

Immediately after the operation of the clyſter, if the ſymptoms of the approaching tetanus allow time for the working of it, give the following medicine.

Take of fennel water, three ounces—of magneſia, half a dram—of prepared powder of crabs-eyes, one dram—ſyrup of ſuccory with rhubarb, and ſolutive ſyrup of roſes, of each three drams. Mix, and give a ſmall tea-ſpoonful or two, according to the age of the infant, every two hours, or every hour, until a ſtool is procured; after which it may be given at longer intervals to keep the body open.

Or, take of fennel-ſeed water, three ounces—of Venetian ſoap, half a dram—of magneſia, half a dram—of ſyrup of ſuccory, with rhubarb and fine manna, of each two drams—of oil of ſweet almonds, three drams. Make a mixture, to be adminiſtered as above.

Having by the uſe of one of theſe medicines procured two or three ſtools, the convulſive ſpaſms may be abated, and the approach of the more dreadful diſorder probably be prevented by the following.

Take of fennel-ſeed water, three ounces—of magneſia, half a dram—of prepared powder of crabs-eyes, one dram—of muſk, three grains—of ſpirit of hartſhorn, fifteen drops —of ſyrup of poppies, half an ounce. Of this mixture give a ſmall tea-ſpoonful three or four times a day, or oftener if the convulſions or ſpaſms are violent.

But if there is reaſon to apprehend that the tetanus is approaching too rapidly to admit of waiting for the operations of the clyſter and the laxative medicine, immediate help muſt be offered in ſome ſuch form as the following.

Take of fennel-ſeed water, four drams—of muſk, one grain—of liquid laudanum, four drops—of ſyrup of poppies, two drams. Mix, and divide into two doſes, of which give one immediately, and the other if the convulſions return.

The adminiſtration of opium being unuſual to infants, the attempt may be cenſured as hazardous; but when no other hope remains of averting the tetanus, in which the little patient's life muſt be expoſed to the moſt imminent danger, it ought certainly to be tried, more eſpecially as unexperienced perſons have frequently given it in larger quantities in much leſs emergent caſes, without it's producing any other ill conſequence than a drowſineſs of a few hours.

At the ſame time that this laſt mentioned medicine is adminiſtered, the clyſter may be given, and in a ſhort time after it, ſo as not to endanger both being thrown up by overloading the ſtomach, the other medicines: the affected parts of the body ſhould alſo be frequently fomented and anointed as before directed; and if the laſt mentioned julep does not anſwer the purpoſe of keeping the child's bowels in a proper ſtate of looſeneſs, which it ſeldom fails to do, a ſmall quantity of the laxative mixture may be given once or twice a day, as long as it is neceſſary.

Different medicines have been preſcribed, that they may be adapted to different conſtitutions and the various circumſtances of the diſeaſe: ſometimes one ſucceeds when another is inefficacious; even in the ſame patient, a variety of medicines may be neceſſary in different ſtages of the diſeaſe, and as the ſymptoms change or are more or leſs aggravated.

But among the preſcriptions which we have offered, ſome may be found applicable to almoſt every ſtate and appearance of the diſeaſe, and if adminiſtered in time, and with proper judgment, and due attention to the immediate apparent circumſtances, will moſt probably effect a cure.

It is almoſt impoſſible to direct a regimen in a diſorder which admits of ſo little being taken into the ſtomach, that even the neceſſary medicines are got down with difficulty; however, the food which can be ſwallowed ſhould be of a light, nouriſhing, and comfortable kind, and where no fever attends, a little generous wine may be mixed both with the food and drinks; the patient ſhould be kept as quiet as poſſible, and all means ſhould be deviſed to prevent the agitation of his mind on any account, which will add very conſiderably to the indiſpoſition of the body.

The ſame care, both with reſpect to food and liquors and to quiet of body and mind, muſt be extended beyond the continuance of the diſeaſe; relapſes are uſual and extremely dangerous, and it not unfrequently happens, that when the tetanus hath been occaſioned by a wound or puncture, and the patient hath recovered, a violent cold or a fit of paſſion hath brought the diſorder back, and the ſecond attack of it hath been ſtronger and more difficult of cure than the former.

Nor muſt we omit to reiterate our caution, to be early in the application of means for relief; this diſorder is prevented without much difficulty, and the progreſs of it ſtopped in the early ſtages with a little more; but if it is ſuffered to gain ground till it arrives at the height, it generally baffles the ſkill of the phyſician, and leaves the patient no other hope of relief from the moſt excruciating agonies, than in the moſt fatal event: there is no diſeaſe, to which the human frame is liable, that calls ſo much for early and vigorous meaſures.

CHAP. IX.

Of the Madneſs occaſioned by the Bite of Mad Animals in the Weſt Indies.

AS a method of treating this dreadful diſorder hath been diſcovered, which is in almoſt every caſe ſucceſsful in theſe climates, though no adequate remedy hath yet been found either to prevent or remove it in Europe, it will be proper to treat of the effects of theſe bites in this place, as fully as if the diſeaſe ariſing from them had not been mentioned in a former part of this work, where the attempts to cure which we have deſcribed are confined to England only.

This diſeaſe is much more frequent in the Weſt India iſlands than in Europe; but, happily for the inhabitants of theſe warm climates, it's effects are leſs fatal, and the treatment and method of cure are as well known as they are generally certain and ſafe.

Though this diſeaſe, in theſe warm climates, is indigenous to the dog kind, yet in the human ſpecies it always proceeds from a poiſonous contagion taken into the blood, by wounds inflicted by the bite of ſome animal: among the brute creation, dogs, foxes, and wolves, which are all of the ſame tribe, are ſaid to be ſubject to this diſeaſe from internal cauſes, without receiving any infection from the bites of other animals, but it is apprehended that cats, apes, horſes, aſſes, mules, oxen, ſheep, ſwine, and fowls, are not liable to it, unleſs they are firſt bitten by ſome diſordered animal, either of their own or any other kind.

The madneſs occaſioned in the dog kind by internal cauſes, ariſes generally from the long continuance of heat and dry weather in theſe climates, and from the want of water, which is the natural conſequence of ſuch ſeaſons; from their being ill-fed, or having the principal part of their ſuſtenance compoſed of putrid, rotten, and maggotty fleſh; the carcaſes of animals, which dying by diſeaſe or accident, are ſoon reduced to ſuch a ſtate of offenſive putrefaction, as to be extremely unwholeſome even to dogs and other carnivorous beaſts.

The ſigns of madneſs in the canine ſpecies in the Weſt Indies are thus deſcribed. Soon after the dog hath been bitten by a mad animal of the ſame ſpecies, he begins to look heavy, ſad, and endeavours to hide himſelf, or retires to ſome dark and bye corner; he ſeldom barks, yet will growl at ſtrangers, and ſometimes attempt to fly at them, though he ſtill knows and is fond of thoſe to whom he has been accuſtomed; after this he begins to decline eating and drinking, frequently touching the food that is offered him with his tongue, but refuſing to take it, he hangs his head, ears, and tail, ſeems weak and drooping, and often lies down; and thus far, though the bite may be dangerous, it is not always infectious.

The ſecond ſtage of the diſorder now comes on, and the animal begins to breathe ſhort, quick, and hard; to open his mouth wide and ſhut it haſtily, leaving the tongue hanging out between the teeth; much frothy ſlaver is now diſcharged from the mouth, and though the dog ſeems to be half aſleep, yet he will rouze ſuddenly, and ſeize any perſon who is unfortunate enough to come in his way; he runs forward without turning, though not in a direct line, and is unmindful of the calls even of his maſter, whom he now ſeems to forget.

As this diſeaſe gains ground, his eyes appear dull and duſty, and much water falls from them; his tongue changes to a lead-colour, he grows weaker but more furious, attempts to fly at man and beaſt, but falls down before he can reach the object; and in this way he generally expires within twenty-four hours after the approach of this laſt ſtage, in which the bite is much more noxious than in the former part of the diſorder, the danger and fatality of the diſeaſe increaſing, in proportion as the wound is inflicted nearer to the animal's death.

Though theſe ſigns differ but little from thoſe we have deſcribed in Europe, yet we think it neceſſary to repeat them here, as in countries where the diſorder is ſo extremely prevalent, it behoves all perſons to be on their guard againſt every animal which may be ſuppoſed to be affected by it; and where, from the ſtate of the body, and the diſpoſition of the conſtitution, it is ſo eaſily communicable to the human ſpecies.

For though we do not altogether credit thoſe relations of this diſeaſe which have recounted the communication of it by a kiſs, by receiving the ſlaver on the lips or tongue, or by biting a piece of thread on which ſome of the froth of a mad dog has long before fallen; yet there is no doubt but the ſlighteſt bite, even tearing the ſkin ſo as ſcarcely to draw blood, will produce this diſeaſe, nor is it improbable that a wound inflicted with the ſame inſtrument which has killed one of theſe mad animals may occaſion the ſame ſpecies of madneſs.

The opinion that the poiſon or infectious matter which produces this diſeaſe will lay dormant in the body for many years, and at laſt be brought into action, has alſo been pretty generally exploded, notwithſtanding the ancients maintained it with great earneſtneſs, and brought many apparently well authenticated relations in ſupport of this doctrine.

The following are the ſymptoms of this diſeaſe in mankind as they are obſervable in the Weſt Indies. The part which has been wounded begins to grow painful ſooner or later, but generally within a month or ſix weeks after the injury has been received; then wandering pains gradually ſpread themſelves from the wound to the adjacent, and after ſome time to more diſtant parts of the body; a wearineſs, ſenſe of weight, and diſinclination to motion, follow; the unhappy patient's ſleep is diſturbed with horrid dreams, and interrupted by ſtartings, twitchings, and convulſive ſpaſms, with continual reſtleſſneſs, and unceaſing toſſing and tumbling in bed; the ſpirits ſeem to be exceedingly depreſſed, ſighs eſcape involuntarily, the countenance expreſſes grief, and the patient deſires to be alone, and avoids entering into converſation, or engaging in any of his uſual employments or amuſements: if, during the continuance of theſe ſymptoms, blood is taken away, it has the appearance of perfect health, and this may be conſidered as the firſt ſtage of the diſorder,

der, which is of longer or ſhorter duration, according to the conſtitution, habit, and other circumſtances.

As the diſeaſe proceeds, all theſe ſymptoms are aggravated, and in addition to them the patient is troubled with great oppreſſion at the breaſt, violent difficulty of breathing, and inexpreſſible dread and horror of mind; which is conſiderably increaſed at the ſight of fluids, or of any poliſhed body which reſembles water, either of which brings on tremblings and extraordinary agitations. The patient now loſes his appetite, though he is ſtill able to ſwallow ſolids and medicines, but attempts to touch any liquids are attended with intolerable anguiſh, and bring on tremors, convulſions, and in ſome inſtances raving madneſs; theſe ſymptoms are accompanied with nauſea, ſickneſs, and a diſpoſition to vomit, and glutinous matter of a brown colour and bilious quality is thrown up: at this period of the diſeaſe a violent fever comes on with internal heat and dreadful thirſt, and ſometimes a priapiſm; ſleep forſakes the patient totally, and his thoughts and ideas are confuſed and rambling, his converſation incoherent and abſurd, and ſometimes broken in upon by paroxiſms of abſolute madneſs.

And now the laſt ſtage commences with a ſtill higher aggravation of all the foregoing complaints: the tongue now becomes of a dark brown or black, grows dry and cruſty, and is ſometimes thruſt out of the mouth; the voice aſſumes that kind of hoarſeneſs which is brought on by any unuſual exertion of it; the thirſt is inſufferable, yet every attempt to drink produces the effects which we have already deſcribed now heightened and augmented; large quantities of frothy ſaliva are gathered in the mouth, which the patient having attempted in vain to ſwallow, endeavours to diſcharge on the bye-ſtanders, whom he alſo makes efforts to bite, though he is ſenſible enough of his own ſituation to warn them of the danger of approaching him; he rages, he foams at the mouth, and groans horribly; the pulſe ſinks, the breath fails, and cold clammy ſweats cover the breaſt, ſtomach, and face; the ravings are more frequent, yet not continual, for there are intervals of reaſon in which the patient expreſſes his apprehenſions of his own approaching fate, and of offering injury to others; and thus in general, on the third or fourth day from the ſeizure, death puts a period to his miſeries by ſuffocation, or in a fit of convulſion.

When an accident of this kind happens, and it appears certain that the animal by whom the patient has been bitten was actually mad, the moſt adviſeable method is immediately to cut out the part, (if it can be done with ſafety) and then to apply a cupping-glaſs over the doubly wounded place as faſt as poſſible, to draw out the blood and any of the poiſonous matter which may have mingled with it before it can be carried into the circulation; after which the whole wound ſhould be cauterized, or burnt with the actual cautery, a red-hot iron, and dreſſed with ſome digeſting ſalve or ointment; the wound ſhould be kept open as long as poſſible with gentle eſcharotics, and waſhed daily with vinegar or ſalt water, if it is at hand: if the wound is received on a part that cannot be cut out with ſafety, it may be lightly ſcarified near the bite, and then cupped, cauterized, and treated in all reſpects as above.

And notwithſtanding we do not place implicit faith in the opinion that this diſeaſe may be communicated by the froth or ſlaver without a bite, yet we ſhould by no means adviſe the omiſſion of any precaution for the prevention of ſo horrid a calamity; on the contrary, we would recommend the burning the patient's cloaths, or at leaſt ſuch parts of them as have been ſaturated by the ſlaver; and if a negro is the ſubject of this misfortune, his ſtraw or other bedding ſhould be in like manner conſumed, as well as that on which the diſordered animal has laid, as it has been conceived that cows and other beaſts have been infected by eating it: whatever weapon has been uſed in the deſtruction of a mad animal ſhould certainly be cleanſed with great care, as there is a much greater probability of communicating the infection in this way.

After the preparatory operations above directed, or when they have been neglected till it is too late to cup and cauterize the wound, provided no conſiderable quantity of blood hath been loſt by the cutting and cupping, it will be neceſſary to take away ſome, eſpecially if the patient is of a full or ſanguine habit; if his ſtomach is foul, an emetic will be alſo proper, but both the bleeding and vomiting muſt be governed by circumſtances.

After theſe evacuations, the following bolus may be given at bed time.

> Take of muſk, ſixteen grains—of native cinnabar finely powdered, from half a dram to two ſcruples—of the ſaponaceous pill, eight grains—of camphire, ſix grains—of balſam of Peru, enough to make the whole into a bolus.

After this bolus, a ſufficient quantity of weak white wine whey ſhould be drank to excite moderate perſpiration.

On the following morning the patient may take a cooling purge, and in the evening of the ſame day, after the operation of it has ceaſed, the patient ſhould bathe either in the ſea, or if that is too diſtant, in a cold bath or river, and either plunge himſelf quite under water, remaining there as long as he can hold his breath, or if he has not reſolution enough to perform this himſelf, it ſhould be done by another perſon; after repeating the immerſion two or three times, the patient's body ſhould be rubbed, not only till it is quite dry, but till a gentle warmth is produced; he ſhould then be put immediately to bed, a bolus as above preſcribed ſhould be adminiſtered, after which he may drink half a pint of the infuſion of valerian root and the bark of ſaſſafras, and at a proper diſtance as much warm white wine whey as will bring on a moderate ſweat, and continue it through the night; and this courſe of bathing, ſweating, and medicine, muſt be repeated at leaſt four times in as many ſucceſſive days; but if the animal from whom the infection was received was in the heightened or laſt ſtage of madneſs, the courſe ſhould be continued near a fortnight, and repeated again at the next full moon and the ſucceeding change of it: and theſe meaſures have in many inſtances prevented the actual approach of the diſeaſe, even after the appearance of ſome of the firſt ſymptoms, ſuch as heavineſs, dulneſs, and diſpoſition to ſolitude.

After the laſt ſweating the patient may bathe in the ſea or cold bath in the morning, and then put on his cloaths and go about his ordinary buſineſs, which will prevent his being liable to take cold, and bringing on a fever, which under theſe circumſtances might be attended with very diſagreeable conſequences.

Having thus treated of the preventive cure, we ſhall proceed to ſpeak of attempting it after the diſeaſe has actually occurred, and the ſymptoms have already appeared; but in ſuch caſes the application ſhould be made with all poſſible ſpeed, as the hope of cure is proportioned to the ſtage of the diſeaſe, in which medicines have been adminiſtered, and proper treatment hath commenced.

And here it may be neceſſary to obſerve, that as the hydrophobia is occaſioned by convulſive ſpaſms of the gullet and organs of ſwallowing, and not from any inflammation of thoſe parts, though the repetition of theſe ſpaſms, and the want of ſupply of diluting liquors, may at laſt bring on an inflammation, which is actually the effect and not the cauſe of the hydrophobia; and as bleeding may abate theſe ſpaſms, and prevent the inflammation from coming on, it may be neceſſary in a moderate way at the firſt approach of the ſymptoms, and as the diſeaſe gains ground a ſtill larger quantity may be taken off; yet it ſeems that the principal part of the cure depends upon the effects of the muſk and other antiſpaſmodic medicines which we have before preſcribed, which may ſo attenuate the infected matter, as to fit it for being carried out of the body by perſpiration, and this not only in the preventive cure, but in the early ſtages of the diſeaſe itſelf.

As we gave a caſe of the hydrophobia in treating of that diſeaſe among thoſe of Europe, we ſhall ſubjoin a few to illuſtrate the treatment and method of cure practiſed in the Weſt Indies.

CASE I.

A Lady's two ſons, her houſekeeper, and ſeven negroes, were all bitten in one morning by a mad dog, and a month after the accident the houſekeeper died raving mad with the hydrophobia.

This fatal event having alarmed the family, a phyſician was ſent for, and on examining the young gentlemen (the eldeſt of whom was of a ſanguine and healthy conſtitution, and about eighteen years old; the youngeſt about thirteen, and of a more tender habit) it appeared, that each of them had been bitten in a leg, and that the wounds, which were not at firſt deep, had been healed up and cicatriſed above a fortnight, and ſeemed at that time perfectly well.

The eldeſt ſon was ordered to be bled, but not the younger, after which a ſmart cooling purge was adminiſtered to each, and at night the bolus, with muſk and cinnabar as directed in the preventive method above preſcribed, leſſening the quantity proportionably for the younger patient; this was ſucceeded by the ſweating and the bathing in the ſea the ſucceeding evening, with a repetition of the bolus and ſweat after it; and this courſe being continued the proper time they both eſcaped this dreadful diſorder.

Of the ſeven negroes who were bitten by the ſame animal, five were the property of the lady, and the other two were hired ſlaves; the former being treated in exactly the ſame way, remained totally unaffected by the diſorder, but the two unfortunate hirelings, not being taken the ſame care of, died mad and hydrophobous about two months after the houſekeeper.

Thus it appears, that out of the ten perſons, who received the poiſon from the ſame dog, and nearly at the ſame time, ſeven were entirely free from the diſeaſe by taking theſe antiſpaſmodic medicines, and uſing the other precautions, whilſt the other unfortunate three, for whom no means were uſed, fell ſacrifices to the infection; and this ſerves to ſhew clearly the efficacy of this preventive method of cure.

CASE II.

TWO negroes, the property of the ſame perſon, were bit by a mad dog the ſame day; one of them complained immediately, and as the wound was in a part of the leg which did not admit of being cut out, the cupping-glaſs was applied and the wound cauterized; after which the courſe of medicine and treatment preſcribed in the laſt caſe was purſued ſtrictly, and the man continued well ever after.

But the other negro having paid no regard to his wound, it healed, and he felt no ill conſequences from it till the next full moon, when he grew dull, heavy, and ſolitary, could by no means be induced to apply to his labour, and having eloped and ſecreted himſelf, was found the next day in a retired corner, endeavouring to hide himſelf from mankind.

In this ſituation no attempt was made to bleed him, as he was of a weak and ſpare habit; but as he was ſuſpected to have a foul ſtomach, an emetic was ordered, and he threw up a conſiderable quantity of greeniſh bilious matter: after the operation of the vomit, the following bolus was adminiſtered.

Take of muſk, twelve grains—of native cinnabar finely powdered, one ſcruple—of the ſaponaceous pill, ſix grains—of camphire, five grains—of balſam of Peru, enough to make a bolus.

And this medicine, which differs only from that already preſcribed as a preventive, in the quantity, which was in this caſe leſſened on account of the patient's conſtitution, was followed by warm diluting drinks, to promote a ſweat as before directed, which took effect properly.

The next morning a cooling purge was adminiſtered, and in the evening he was put into a river, the ſea being too diſtant, and kept under water as long as he could remain there with ſafety; and after the bathing, being rubbed dry, he was put to bed, and the bolus and ſweating repeated.

At this time, though the ſymptoms did not appear to be much abated, yet it was very apparent that they had not increaſed; but as the patient's pulſe began now to quicken conſiderably, it was thought neceſſary to take away ten ounces of blood, and after this evacuation they very ſoon became tolerably regular; and the ſame medicines, with the bathing and ſweating, being continued, he was at the end of ſeven days pronounced perfectly well, and reſumed his uſual employments.

But the ſame ſymptoms returning at the next full moon, the courſe was not only recommenced, but perſiſted in for a much longer time; and the complaints being thus removed a ſecond time, and proper cautions uſed at the approach of the ſucceeding full moon, by giving a bolus or two, and repeating the bathing and ſweating, he alſo remained from that time without being viſited by any of the complaints.

CASE III.

A Young gentleman, about eighteen years old, was bitten by a mad dog; the wound was in the back-part of his leg, about four inches above his heel, and after bleeding a little was healed up in about a fortnight; at the next full-moon after he met with this misfortune he appeared to be heavy, dull, and very much dejected, but in three or four days theſe ſymptoms diſappeared, and he remained well till the ſucceeding full moon, when all theſe ſymptoms returned in a much ſtronger degree, attended with a great deſire of being alone. On the firſt night after this ſecond ſeizure he had little reſt, and when he fell into a ſleep it was diſturbed and interrupted, and at the requeſt of his father he roſe and dreſſed himſelf, but immediately retired to a dark place under the roof of the houſe, and being deſired to leave it, declined it, declaring his unwillingneſs to ſee or ſpeak to any perſon; a phyſician being ſent for, who was intimate in the family, and well acquainted with the patient himſelf, he was with difficulty prevailed on to receive his viſit, which he at laſt admitted on condition that he ſhould be unaccompanied. Being queſtioned by the phyſician about the bite of the dog, he ſaid, "*that was nothing, it* "*had been healed a fortnight*;" and he had continued well ever ſince: but he complained that he had now an uneaſy ſenſation and weight at his breaſt and ſtomach, felt himſelf extremely dejected without being able to account for the change, and acknowledged his preſent propenſity to ſolitude, though he was naturally of a lively and chearful diſpoſition.

It being apparent that theſe were all ſymptoms of madneſs approaching from the bite of the dog, which animal could not however be inſpected, having made it's eſcape; eighteen ounces of blood were ordered to be taken from him immediately; in the evening an emetic was adminiſtered and worked off with green tea, and the following bolus was given at bed time, and after it a ſufficient quantity of white wine whey to keep up a breathing ſweat through the night.

Take of the ſaponaceous pill, ten grains—of volatile ſalt of amber, and camphire, of each eight grains—of muſk, ten grains—of diuretic ſalt, one ſcruple—of oil of ſaſſafras, two drops—of balſam of Peru, enough to make a bolus.

The next morning the patient took a briſk cooling purge, which operated freely, and the following night the bolus was repeated; he ſlept better, and ſweated copiouſly both nights, and finding himſelf better, went to the ſea, and bathed every night for five or ſix nights, taking the bolus, and ſweating after it regularly: at the end of this time, the bathing, medicine, and ſweat, were only repeated every other night, and in this way were continued three weeks longer, when finding himſelf perfectly well, the whole courſe was omitted, and the patient remained in perfect health.

CASE IV.

A Middle-aged white woman, of a good conſtitution, though not extremely robuſt or ſtrong, having been bit by a mad dog, remained in health after the healing up of the wound near three months, about which time after the bite ſhe was ſeized with the firſt ſymptoms of the diſeaſe, and as the circumſtance of the accident was hardly remembered, no notice was taken of her indiſpoſition, till the ſigns of madneſs came on, and before any medical help was procured, the hydrophobia had been upon her near thirty hours, and the madneſs was ſo violent, that ſhe was bound to the bed when the phyſician firſt ſaw her.

She was immediately ordered to be bled to faintneſs, and as much blood to be taken away as could be drawn off without immediate hazard of death.

Two hours after this operation ſhe was plunged into a tub of cold water, immerſing her head and whole body, and this immerſion was repeated two or three times, the patient being each time kept under the water as long as poſſible without actual drowning; ſhe was then taken out of the water, rubbed perfectly dry, and put into bed, and immediately after one of the foregoing boluſes with muſk and cinnabar was adminiſtered, which ſhe ſwallowed without much difficulty, as no liquid of any kind was offered her with it.

About three hours after this medicine ſhe could bear the ſight of fluids; a draught was given her of the infuſion of the root of valerian and the bark of ſaſſafras, with nitre and diuretic ſalt, ſweetened with ſugar, and this was got down with little difficulty; about half an hour after ſhe drank ſome white wine whey with tolerable compoſure and eaſe.

In two hours after the draught, and about five hours after ſhe had been bathed, great part of which time ſhe had ſweated freely, ſhe fell into a ſound ſleep, which continued for four hours with very little diſturbance or interruption, the perſpiration continuing the whole time, and ſhe awoke calm and ſenſible, and the averſion to liquids was ſo much abated, that ſhe drank plentifully of the white wine whey to keep up the ſweating, taking one of the draughts every third hour; and this warm, breathing perſpiration, was continued forty-eight hours, the bolus having been alſo thrice repeated in that time.

On the morning after the diſcontinuance of the ſweating, a ſmart cooling purge was adminiſtered, which operated well, and ſhe continued the uſe of the whey freely; at night the bolus was repeated, with whey after it, and ſhe ſlept well, and had a gentle perſpiration through the night: in the morning ſhe appeared to have loſt every ſymptom of the diſorder, and to have no complaint but the weakneſs which had been occaſioned by the evacuations; from this ſhe was ſoon relieved by nouriſhing diet, and lived many years after without any return of the diſorder.

From theſe ſeveral caſes it appears, that an almoſt infallible method may be purſued of preventing any ill effects from the bites of mad animals in warm climates, and that the means of obviating the dangers of the hydrophobia, one of the moſt horrid diſeaſes which afflict human nature, are ſimple, and ſo eaſily attainable, that it would ſeem an unpardonable neglect not to apply them, where even a ſhadow of ſuſpicion ariſes that a wound has been inflicted by an animal in a ſtate of madneſs.

And from the caſes which we have ſelected it is equally apparent, that well-grounded hope of cure may be entertained, even after the approach of the diſorder itſelf, and almoſt in every ſtage of it, if the friends and attendants of the patient are not induced by ill-judged tenderneſs to abate of purſuing rigidly a line of treatment, which though it may appear ſomewhat ſevere, is abſolutely neceſſary to the preſervation of the unhappy victim of this active and deadly poiſon.

CHAP. X.

Of the Chronic Thruſh of the Weſt India Iſlands.

THIS malady was rarely ſeen in theſe iſlands forty or fifty years ago, but it has continued to increaſe, and has of late years become extremely frequent, though it does not ſeem to be in the leaſt infectious or contagious. The patient who is about to be attacked by this diſeaſe, uſually firſt complains of an uneaſy ſenſation, or ſlight burning heat about the breaſt or upper mouth of the ſtomach, which comes ſlowly on, increaſing gradually, and riſes up the gullet into the mouth, without being attended with any fever, the leaſt feveriſh heat, or much pain, and moſt commonly without any obſervable intemperance or irregularity in living, or without any ſurfeit, taking cold, or being preceded by any ſort of fever or other diſorder to which it can be attributed, or any manifeſt or immediate cauſe to which it can be aſcribed. Soon after this burning heat, ſmall puſtules or pimples, no bigger than a pin's head, and filled with a clear acrid water, begin to riſe, generally firſt on the end and ſides of the tongue, and gradually increaſing in number but not in magnitude, ſpread ſlowly under the tongue, and ſometimes to the palate, the roof of the mouth, and the inſide of the lips; ſoon after the thin ſkin which covers theſe puſtules ſlips off, and the tongue looks red and ſomewhat inflamed, though not ſwelled, yet is almoſt raw like a piece of raw fleſh, and ſo tender and ſore that the patient can eat no food but ſuch as is ſoft and ſmooth, nor drink any thing that is vinous, ſpirituous, or the leaſt pungent, without acute pains, ſo that he frequently ſuffers much from the want of proper nouriſhment. In ſome a ſpitting comes on, and continues a long time, which is ſo far from being of any ſervice, or giving any relief to the patient, that, on the contrary,

trary, it drains and exhauſts the fluids of the body, and contributes to waſte and debilitate it: in this ſtate the patient continues ſeveral days or weeks, nay, even for months, ſometimes a little better, then worſe again; and after a conſiderable time, ſometimes earlier and ſometimes later, the puſtules will diſappear, and the mouth grow well without any medicines or applications, or any apparent cauſe; and having continued ſo for ſeveral days or weeks, the patient finds a burning heat in the ſtomach and gullet, attended with eructations, and ſometimes vomitings, diſcharging a clear acrid watery phlegm, which is very hot, and moſt commonly, though not in every caſe, very acid.

After theſe complaints have continued a little time, a diarrhœa comes on, the continuance of which is longer or ſhorter in different patients, and ſometimes in the ſame perſons at different ſeizures or paroxiſms; ſome it troubles for many weeks, and in all it greatly waſtes the fleſh and ſtrength, and depreſſes the ſpirits exceedingly: this diarrhœa alſo ſometimes ſtops at different periods without any medicines being taken, or any means uſed to check it, and the patient thinks himſelf better for a ſhort time, but in general the acrid humour ſoon returns to the mouth again with all the ſame ſymptoms, but in an increaſed or aggravated degree; and after ſome ſtay there, it removes back to the ſtomach and bowels again: and thus a ſhifting of the humour from the mouth to the bowels, and from the bowels to the mouth, is frequently and ſometimes ſuddenly made, without any manifeſt or perceptible cauſe. In ſome particular inſtances, though they do not often occur, after the diſeaſe has continued a long time, it affects all the firſt paſſages from the lips to the fundament at the ſame time, and excoriates the laſt; and caſes have occurred where the puſtules have appeared about the genital parts, as ſometimes happens in the common thruſh, and others where it has broke out like an impetigo, or ring-worm, about the mouth.

During the progreſs of the diſeaſe the patient is perfectly free from any fever or feveriſh heat, and his pulſe is all this time rather more ſmall, low, ſlow, and languid, than when he was in full health, but his countenance is rather paler, and his body, and particularly the extremities, ſomewhat colder; nor is the patient troubled with thirſt, except what the diarrhœa cauſes when it continues long, and that ſeldom exceſſive or violently urgent; the patient's ſkin is generally dry during the whole courſe of the diſeaſe, and he perſpires very little: by theſe frequent ſhifts and changes, which this acrid humour makes from the mouth to the ſtomach and bowels, and from thoſe to the mouth again, the patient is greatly emaciated and weakened; for when it is in the mouth, the tongue and every other part of it is, as before obſerved, ſo excoriated, raw, tender, and ſore, that he can ſcarce take any other nouriſhment than liquids and ſpoon-meats without exquiſite pain, and when it is in the ſtomach, it occaſions ſuch a painful burning ſenſation, and ſuch a frequent gulping up, or vomiting, a clear, acrid, acid liquor, together with whatever food is taken down, that the ſtomach is unable to retain and digeſt a ſufficient quantity of nutrition to ſupply the body with juices to ſupport life: and when the humour falls upon the inteſtines, it produces the diarrhœa with a ſenſe of heat, and ſometimes a griping, (though the laſt is not a conſtant ſymptom) with hot ſtools, and a teneſmus, or perpetual inclination to go to ſtool, ſo that moſt of the nutritious juices run off that way, and the patient is by this means deprived of his ſtrength. From the continuance of theſe circumſtances, and the frequent ſhifting of the diſeaſe from place to place, almoſt continually, thus preventing the ſick from taking proper nouriſhment, an atrophy or waſting of the fleſh is produced, under which the patient ſinks, or a conſumption comes on, which ſoon ends in death.

This is an exact deſcription of a diſeaſe and it'ſſymptoms, which frequently attacks the inhabitants of the Weſt India iſlands, and too often proves fatal.

The nature, ſymptoms, and appearances of this diſeaſe, are conſiderably different from thoſe of the true aphthœ, or thruſh, either of the ancients or moderns; the latter diſorder being either attended with a fever at it's firſt approach, or the firſt ſymptoms are immediately followed by a putrid fever, an irregular intermitting fever, a dyſentery, a feveriſh diarrhœa, or ſome other fever: but this comes on gradually, ſlowly, and almoſt imperceptibly, and always without fever either preceding or accompanying it in any part of it's progreſs. The puſtules of the common thruſh are uſually much larger, and either ſuppurate and fill with a concocted matter, and form little ulcerations, or turn black and become gangrenous. In this diſorder the puſtules are very ſmall, and fill with a clear, acrid, watery fluid, which excoriates the parts, but they rarely or ever fill with matter, except here and there a ſingle puſtule when the diſeaſe has continued long; and theſe never form ulcers or turn to gangrene. This diſorder uſually ſeizes people advanced in years, very ſeldom young people, and never children. The common thruſh moſt frequently ſeizes children, more rarely youths, and ſometimes elderly perſons, but only with or immediately after ſome ſevere fever. This diſeaſe is never accompanied with a fever in any degree, or in any ſtage of it, but on the contrary the patient has generally a ſmall, low, and languid pulſe, and is uſually colder than in health. The common thruſh is but of a ſhort duration, is an acute diſeaſe, and the patient either dies or recovers in two or three weeks, or leſs, from the attack; but this diſeaſe continues with ſhort intervals of being a little better, and then worſe again, for many months, and in ſome inſtances for years, before it proves fatal: indeed, ſome perſons are ſaid to have lived under it for eight or nine years; though leſs than a year has put a period to the lives of others, eſpecially if they had lived too freely, or did not ſeek for proper aſſiſtance in due time.

It alſo differs conſiderably, and in many reſpects, from an eryſipelas or any eryſepalatous eruption; and in many reſpects from an impetigo, though it reſembles that diſeaſe more than any other; and if it was external, would probably produce ſcaly ſcabs on the ſkin after the puſtules broke.

As this diſeaſe comes on ſo ſlowly, and increaſes gradually and almoſt imperceptibly, and continues with little other pain or inconvenience to the patient than the ſoreneſs of the mouth, and ſometimes a little griping in the bowels, it too often paſſes unnoticed, or is trifled with, till it is far advanced, and even then, it is ſometimes difficult to convince the patients that they are in any danger from it, or to prevail on them to take neceſſary medicines and uſe proper precautions; ſo that it is too often neglected till it is beyond the power of medicines, or the reach of art. No deſcription of this diſeaſe being found in any author, either ancient or modern, the foregoing has been obtained by carefully obſerving it's ſymptoms, and examining what functions of life were either impaired, irregularly performed, or obſtructed; and from thence the treatment and method of cure hereafter recommended hath been alſo deduced.

As this diſtemper generally comes imperceptibly on, and often without any apparent cauſe, it is difficult to diſcover what is the original occaſion of it; but it appears from the nature, ſymptoms, and diſpoſition of this diſeaſe, that whatever diminiſhes the ſtrength of the vital powers, and leſſens the motion of the circulating fluids, and at the ſame time obſtructs the paſſage of the quantity of matter which ought to be carried off by inſenſible perſpiration and ſweat, may be the primary cauſe of this diſeaſe; and theſe cauſes may be various, ſuch as a natural delicacy and weakneſs of habit, or too great a relaxation, of the ſolids; taking cold, uſing wet linen, damp ſheets, or otherwiſe too ſuddenly ſtopping or obſtructing the perſpiration in ſuch a weak, relaxed conſtitution; frequent exceſſes in drinking vinous or ſpirituous liquors; too great anxiety, diſtreſs, or other agitations or paſſions of the mind, and a great variety of other circumſtances, which tend at the ſame time to relax the ſolids, and diminiſh the inſenſible perſpiration.

From the ſmall, low, weak pulſe, from the total abſence of fever, and from the coldneſs of the body, and eſpecially of the extreme parts, it is apparent that there is too great a relaxation of the ſolids, and conſequently a great diminution of the vital powers and the motion of the fluids; the dryneſs and roughneſs of the patient's ſkin, which uſually attends this diſeaſe, ſhews an obſtruction and great want of perſpiration and ſweat, which in theſe warm climates generally are and ought to be conſiderable in a ſtate of health: and the excoriation and ſoreneſs of the mouth, tongue, throat, ſtomach, and inteſtines, plainly demonſtrate, that an acrid or ſharp humour is turned upon thoſe parts, and produces thoſe effects; ſo that a relaxed ſtate of the ſolids, a diminiſhed motion of the fluids and obſtructed perſpiration, and an acrimony of the humours ariſing from thence, and increaſed by the heat of the climate, are the immediate concurring cauſes of this diſeaſe; for it is well known, that the perſpirable matter, or any other excreted fluid being obſtructed and thrown back upon other excretory veſſels, ſoon becomes acrid, and that it muſt ſtill be rendered much more ſharp by retenſion in ſo warm a climate.

Theſe being the cauſes of this diſeaſe, our endeavours to obtain the cure of it muſt be directed to cleanſe the firſt paſſages, open the perſpiratory pores, and reſtore a free perſpiration and ſweating; to correct and carry off the acrimony of the humours, to check the purging, and ſtrengthen the tones of the ſtomach and inteſtines, and aſſiſt nature to expel the humours from the internal parts to the ſurface of the body, that they may be properly and naturally carried off by perſpiration and ſweat, and to ſtrengthen the relaxed ſolids, and increaſe the motion of the fluids, and thereby contribute to re-eſtabliſh health, by reſtoring and continuing a free perſpiration.

As the humours are thus turned upon the firſt paſſages by the above mentioned cauſes, and have had their courſe that way for a conſiderable length of time, as is commonly the caſe, the ſtomach and bowels are generally loaded with phlegm, and are foul; an emetic is therefore firſt neceſſary, both to cleanſe them and render the other medicines more effectual, as alſo to encourage perſpiration: for theſe purpoſes the powder of ipecacuanha is unqueſtionably the propereſt; and a doſe of toaſted rhubarb, with an opiate and perſpirative, ſhould be taken after it; and if the diarrhœa has continued ſome time, it will be proper to give a ſmall doſe of the ipecacuanha powder, to the amount of two or three grains, about five o'clock in the evening, and a perſpirative opiate after it has operated once or twice, at going to bed, for ſix, eight, or ten evenings, according to the length of time that the diarrhœa has continued before the commencement of this courſe.

After this preparation, the following alteratives and corroborating perſpiratives may be given.

Take of precipitated ſulphur of antimony, five drams—of calcined quickſilver very finely powdered, one ſcruple—gum guaiacum powdered, and extract of gentian, of each one dram—of camphire, two ſcruples—of opium, ten grains—of balſam of guaiacum, enough to make theſe ingredients into a maſs, which is to be divided into ſixty pills; of which the patient may take three every night at going to reſt, drinking after them two or three ounces of the following infuſion.

Take Virginian ſnake-root, the bark of ſaſſafras, and of pomegranate, of each one ounce—of cinnamon, two drams—of ſalt of wormwood, one dram. Mix theſe together, and pour on them a quart of boiling water; let it ſtand eight hours, then ſtrain it off fine, and add to the liquor, of ſaffron wine, one ounce—of Mindinerus's ſpirit, three ounces. Mix, and adminiſter as above. Two ounces of this infuſion may alſo be taken every morning.

From thirty to forty drops of the antimonial wine may be added to each doſe of the infuſion; and during the time that the patient takes theſe medicines, his body ſhould be well rubbed for half an hour every night and morning with a fleſh-bruſh, or a coarſe and warm dry flannel cloth, in order to procure a free perſpiration; the patient ſhould alſo uſe moderate exerciſe on horſeback, or in a chaiſe if he is weak, to increaſe the motion of the fluids, and invigorate the ſolids: he muſt be careful to avoid expoſing himſelf too ſuddenly to a cool air, or the damp moiſt air of the night, and he muſt be cautious in changing his linen, that what he puts on is perfectly dry.

If the acid humour affects the ſtomach with a burning heat and pain, and ſour belchings, as it often does in this caſe, a dram of magneſia in a draught of milk and water, ſweetened with a little ſugar, and given in the morning, will correct the acidity, and carry it off by a gentle motion or two; and this may be repeated every third or fourth morning, as the acidity returns.

This courſe of medicines ſhould be continued conſtantly, till it appears that the motion of the circulating fluids is ſufficiently invigorated, and the patient has acquired a conſtant, regular, equal warmth, without it's being forced by exerciſe; and in order to obtain this deſired end, it is generally neceſſary to add a ſmall quantity of the chalybeat wine and a little Peruvian bark to the before mentioned warming and corroborating medicines, towards the latter end of the cure, and to continue the uſe of them till the patient has recovered his fleſh, colour, and ſtrength, and is perfectly reſtored to health; otherwiſe he will be ſubject to relapſes, and the return of the diſeaſe will be more troubleſome than the firſt attack.

But if the diſorder has continued a long time before aſſiſtance has been called for, as is too frequently the caſe, ſo that the patient is much emaciated, and the diarrhœa has made frequent returns and has been of long continuance, and the patient has been reduced low, it will be abſolutely neceſſary to repeat the ſmall doſes of ipecacuanha and the perſpirative opiate ſeveral times at any ſtage of the diſeaſe, and particularly in caſe of the return of the diarrhœa, and ſtrong and ſtrengthening medicines to promote ſweating muſt be conſtantly given afterwards, till this diſcharge is effectually checked; and if this is not effected, a free perſpiration cannot be reſtored and continued, without both which no expectation can be formed of the patient's perfect recovery: and as it often happens that ſolid medicines are retained longer in the ſtomach and inteſtines than liquids, and will anſwer where the liquid will not; when the diſeaſe has proved obſtinate, after giving ten or twelve ſmall doſes of the ipecacuanha as before, without it's producing the deſired effect, the following electuary and decoction may be tried.

Take of the electuary of ſcordium, (water germander) one ounce—of Venice treacle, half an ounce—Japan earth, and the bark of pomegranate powdered, of each two drams—of cinnamon powdered, one dram—of precipitated ſulphur of antimony, two ſcruples—of ſyrup of poppies, enough to make the whole into an electuary; of which the quantity of a large nutmeg may be taken morning and night, or oftener if the diarrhœa is urgent, drinking after it two ounces of the following decoction.

Take the pomegranate bark, and Virginian ſnake-root, of each one ounce—of cinnamon, two drams. Boil theſe ingredients in a quart of water till it is reduced to a pint; towards the end of the boiling, add one ounce of the electuary of ſcordium; boil it a little longer, then take it off, let it ſtand till it is cold, ſtrain it, and add to the ſtrained liquor, cinnamon water, and tincture of Japan earth, of each one ounce—of ſyrup of poppies, half an ounce. Mix well together: to be taken as above, and three or four ſpoonfuls may be alſo given after every looſe ſtool.

The rubbing the body and the exerciſe of riding ſhould be continued at the ſame time, and the other precautions obſerved.

Yet, if notwithſtanding this management and the uſe of theſe medicines the diarrhœa proves obſtinate, and it's returns are frequent, as is often the caſe in a diſorder the changes of which are more various and the difficulty of cure greater than in moſt others, and if the patient's ſkin is ſtill dry, ſo that he cannot be brought to perſpire as freely as he ought; warm bathing, in ſome natural warm baths, and corroborating perſpiratives at the ſame time, promiſe the beſt ſucceſs.

It may poſſibly be objected, that warm bathing will relax the ſolids, already too much relaxed by the diſeaſe; but if the freedom of perſpiration cannot be reſtored, the diſtemper will never be effectually cured, and though it may ſeem to abate for ſome time, yet it will often return again; and though many recover perfectly without warm bathing, yet with ſome no other method that can be tried will ſucceed; and if the patient's ſituation is ſuch that he cannot go to any natural warm baths, or there ſhould be none on the iſland where the patient reſides, which is the caſe in Barbadoes, an artificial warm bath may be made of common ſal martis, (or green copperas) ſulphur vivum, ſome aromatics, and water made as warm as the natural warm baths at Bath in England, or elſewhere; and in this artificial bath the patient ſhould be well rubbed whilſt he remains in it: but this method cannot be expected to anſwer in all reſpects ſo well as the natural warm baths; to which the patient ſhould have recourſe if he can with any conveniency go to them, and particularly as they do not relax the veſſels of the body in general (though they may have that effect on thoſe which are on or near to the ſurface of it during the time the patient is actually in the bath) ſo much as the artificial baths do, notwithſtanding the utmoſt care is taken that they are not made warmer; nor are thoſe who bathe in the natural baths ſo ſubject to take cold after bathing, as thoſe who bathe in the artificial ones; and it muſt be granted that the natural warm ſulphureous baths of Bath, Aix-la-Chapelle, Barege, Aix in Provence, and thoſe in Portugal, (and it is very probable that the warm baths in Jamaica, Nevis, and Carolina, if they were properly examined by fit experiments, would be found to be of the ſame nature, and in all reſpects as good as thoſe above mentioned) greatly exceed all the warm baths that art can ſubſtitute; for here Nature is chymiſt, and her powers far excel thoſe which the greateſt artiſt or the ableſt chymiſt can employ; beſides, thoſe who go to thoſe natural warm baths, have the advantage of drinking their waters daily during the time of bathing, which anſwer the purpoſe of attenuating, diluting, and diſſolving the acrid ſaline humours, and enabling at leaſt ſome of them to be carried off by ſweat and urine; and what is ſtill of greater importance, by drinking thoſe waters, the ſolids will be ſomewhat braced, and the circulation of the fluids increaſed, and conſequently a more free and general perſpiration obtained and continued. And though warm bathing may, as has been already obſerved, be objected to, as tending to relax the ſolids for a time, yet as it muſt be allowed to contribute to the cleanſing the obſtructed mouths of the perſpiratory pores and the paſſages of the ſweat, and gently relaxes the coats of thoſe obſtructed veſſels on the ſurface of the body, whilſt the heat of the bath increaſes the motion of the circulating fluids at the ſame time, they muſt, by thus jointly acting together, more effectually remove the obſtructing cauſe, and carry it out of the ſmall veſſels, ſince relaxing the coats of thoſe ſmall veſſels will have the ſame effect as increaſing their diameters, and the motion of the blood being increaſed by the heat of the bath, this muſt certainly be the moſt effectual method to remove ſuch obſtructions; and Nature may be aſſiſted in this work, by giving ſome ſuch deobſtruent perſpirative draught as the following, half an hour before the patient goes into the bath.

Take of Virginian ſnake-root, from half a dram to a dram—of Venice treacle, half a dram. Mix the ingredients, and pour on them as much boiling water as will ſtrain off to one ounce and half; let it ſtand to grow cold, and when ſtrained, add to the liquor, of diuretic ſalt, one ſcruple—of Mindinerus's ſpirit, three drams—of ſaffron wine, two drams—of ſyrup of ſaffron, two drams. Make a draught, to be taken as above.

The patient's body ſhould alſo be very well rubbed, both when he is in and after he comes out of the bath; and he ſhould then immediately go into a warm bed, and encourage a free perſpiration, and moderate ſweating, by drinking warm Bath water; and the corroborating perſpirative medicines before adviſed may be continued with the Bath waters, during the intervals between the times of going into the bath, in order to brace up and ſtrengthen the internal relaxed weak veſſels, increaſe the motion of the fluids, and enable nature to caſt out the humours from the internal parts to the ſurface of the body, that they may be carried off by perſpiration in their natural way: and though warm bathing may in ſome meaſure relax the veſſels on and near the ſurface of the body, yet it does not materially affect the larger internal veſſels which are not expoſed to it, ſo much as is ſometimes apprehended; but going into the baths with too great fulneſs of the veſſels will undoubtedly do much hurt, and want of prudence in this particular may have brought bathing into ſome diſcredit, and occaſioned the diſuſe of it.

As to the uſe of gargles in this caſe, they are but of little ſervice, except healing ones when the mouth is very ſore; all others ſerve only to repel the humours from thence to the ſtomach and bowels, to which they are but too often tranſlated without ſuch aſſiſtance, where they produce a diarrhœa, which is moſt difficult to be cured, and where the ſtrongeſt reſtringents without perſpiratives will at the beſt only ſtop it for a little time, and it will either upon taking a little cold, or the leaſt irregularity, return again: it will be neceſſary, therefore, to adviſe the patients, eſpecially when they cannot reſort to the baths, to uſe the reſtringent perſpirative medicines above preſcribed, at leaſt once or twice a day, for ſome time after the diarrhœa is totally ſtopped, in order to ſtrengthen the tones of the ſtomach and bowels, as well as to invigorate the motion of the circulating fluids, and reſtore and eſtabliſh a free perſpiration; and for the ſame purpoſes, towards the latter end of the cure, ſome chalybeats may be added, which will very much contribute to the deſired end of a perfect and laſting recovery.

CHAP. XI.

Of the Nyctalopia; or Night Blindneſs of the Weſt Indies.

THIS is a diſeaſe which is ſo prevalent among the negroes in this warm part of the globe, as well as in Africa, that it may be juſtly deemed an indigenous or endemial diſeaſe in the torrid zone, though it is but very ſeldom obſervable in England or in the other parts of Europe; it is now ſo frequent among the negro ſlaves in the Weſt India iſlands, that ſix, eight, ten, or twelve negroes, in ſome eſtates, are attacked by it when the night comes on, ſo that the other negroes who can ſee well are obliged to lead them home; yet as long as the ſun is above the horizon, they are as capable of diſtinguiſhing objects plainly as the others, but as ſoon as it goes down their ſight begins to grow dim, and as the darkneſs of the night approaches that dimneſs increaſes, and they become perfectly dark and blind; and this blindneſs continues till the morning when the ſun begins to riſe, at which time their ſight returns and continues till night, when they become blind again; and thus they continue to be blind in the nights and to ſee in the days for a long time, if not relieved by proper remedies: ſometimes ſome of them will recover their ſight for ſeveral nights, and then loſe it again, and ſo repeatedly.

It has not been obſerved that the variations of the weather have any influence or effect on this diſeaſe, either in producing, increaſing, or abating it, only that a continued clear, dry, hot ſeaſon, has ſome little effect on thoſe who are ſubject to it.

This night blindneſs comes on in the evenings after the ſun ſets, with a miſty dimneſs, gradually increaſing as the night approaches till it becomes dark, when the ſight becomes perfectly dark alſo, and that without any pain either in the head or eyes, or elſewhere; ſometimes a ſenſe of fulneſs in the head, and a ſmall tingling in the ears attends it, and at other times not, but without any ſwimming or giddineſs, or any oppreſſion or ſickneſs at the ſtomach, loſs of appetite, or any other complaint but the loſs of ſight; all the ſecretions and other functions of life appear to be performed with due regularity, nor do the eyes ſeem to be impaired or altered; the cornea or firſt coat of the eye, and pupil or ſight, appear perfectly clear and well, and the iris or ſecond coat alſo continues to contract a little in the day time, and dilate as uſual in the night, yet no viſion is then performed, nor does there appear to be any flux of humours to, or any ſigns of inflammation in the eyes.

As no external injury or impediment in the eye appears, the cauſe of this diſorder muſt be internal; and as no pain or any ſign of inflammation attends it, it cannot be ſuppoſed to proceed from any obſtruction of the veſſels, through which either the blood or fluids circulate; it muſt therefore ariſe from ſome indiſpoſition of the inner ſurface of the eye or optic nerves, or both; and as this is a diſeaſe which is moſt common within the torrid zone, where the reflections of the rays of light are ſtrong and vigorous, and the ſun being ſeveral hours every day almoſt perpendicular over the heads of the inhabitants; the angle of reflection is very acute, and the rays of light muſt be ſtrongly reflected from the earth and other bodies into the eyes, and conſequently the ſenſation of them, and the vibrations of the inner ſurfaces and the optic nerves, muſt be proportionably great; and being thus accuſtomed to ſuch continued ſtrong vibrations, they become weak, and their tones are impaired, ſo that they grow inſenſible to the ſmall weak vibrations of the few inactive rays of light which exiſt in the night, and move with a force almoſt infinitely leſs than thoſe of the day in theſe climates; and when this happens to ſuch eyes as have a natural imbecility in the formation of their nerves, by the ſtrong continued vibrations of the day-light they become in ſome degree paralytic, ſo that they remain blind till the ſun returns in the morning, and renews the ſtronger vibrations of light again, when their ſight is reſtored.

This ſeems to be the cauſe of the diſeaſe, and the moſt rational and ſatisfactory way of accounting for it, together with all it's ſymptoms and appearances, in a plain and ſimple manner.

The *hemeralopia* is a diſeaſe which is very ſeldom met with; thoſe who are ſubject to this diſorder ſee tolerably well in the night, but very little in the day, and not at all when the ſun ſhines bright; and this indiſpoſition of the eye proceeds from a different and directly contrary cauſe to the other; that is to ſay, from too great a tenderneſs and ſenſibility of the external or internal coats, though this complaint is alſo unattended with any degree of inflammation. Theſe patients can dilate the pupil of the eye, and ſee well in the night; but this is a very uncommon diſeaſe.

The methods of cure which have been uſed in the nyctalopia are various, but little has been ſaid of the cure of the hemeralopia, as it is ſo very ſeldom ſeen.

From the periodical return of the firſt mentioned diſeaſe with the darkneſs of the night, ſome have ſuppoſed it to be of the intermitting kind, and therefore thought it ſhould be treated as ſuch; but the periodical returns of this diſorder are ſolely owing to the periodical returns of the darkneſs of the night, and not to any thing in the diſpoſition of the diſeaſe; and the Peruvian bark may prove more injurious to the patient's conſtitution in ſome other reſpects, eſpecially as it appears, that the methods which are prejudicial in intermitting fevers, and add to the violence of theſe diſorders, contribute greatly to the cure of this diſeaſe, in which bleeding once to a greater or leſs quantity, as the patient's habit is more or leſs full, and purging twice or three times with ſome cooling and attenuating medicine, and giving the wild valerian root in powder, together with the volatile tincture of it, two or three times a day in the intermediate days, and for two or three days after the laſt purge, generally removes the diſeaſe, and reſtores the patient to his perfect ſight.

The following collyrium hath been recommended to aſſiſt the cure.

Take of roſe water, one ounce and half—of antimonial wine, half an ounce. Mix; and with this collyrium waſh the eyes every morning, and at night going to reſt.

CHAP. XII.

Of the Elephantiaſis of the Weſt Indies.

THE *elephantiaſis* is alſo a diſeaſe indigenous or endemial to ſuch countries as are within the torrid zone.

The patient when apparently in perfect health, and without any preceding diſcoverable cauſe, is firſt ſeized with a cold ſhivering like the fit of an ague, which continues one, two, or three hours, with acute pain in the head and back, a ſickneſs at his ſtomach, and ſometimes a vomiting, and great pains in one of the groins, ſometimes in the right and in other caſes in the left, but never in both; and whether it falls on the right or left the firſt time, it generally continues from twenty to forty-eight hours, and ſometimes longer; the patient is often delirious, the pain in the groin increaſes, and it ſwells and becomes red and hard, but rarely or ever ſuppurates: ſoon after it is thus ſwelled, a red ſtroke appears running down the thigh from the tumified gland of the groin to the leg, almoſt an inch broad, and of a freſh colour; and now the leg begins to ſwell, and is much inflamed, and as the inflammation of that part increaſes, the general fever abates, and moſt commonly in four or five days time, ſometimes ſooner, at other times later, goes entirely off; and in this time the ſwelling of the groin ſubſides, and is reduced to it's natural ſtate: by this imperfect criſis the diſeaſed matter is thrown on the leg, which continues to be much inflamed and ſwelled for ſeveral days, and then both theſe ſymptoms go gradually quite off, and the patient ſeems to be perfectly well again. This fever makes frequent returns with all the ſame ſymptoms, and in the ſame manner, at no certain periods; ſometimes twice, thrice, or four times in a year, eſpecially in the firſt two or three years of the diſeaſe; in others, once a month or three weeks, or oftener; and inſtances have occurred where the fever hath approached and diſappeared four times in eleven or twelve days; and the periods of it's return are ſo uncertain, that it will ſometimes happen, at two or three weeks end, and the next time not till three, four, or ſix months after; but whenever it returns, the ſame leg is affected as at firſt, and the other remains undiſordered. After each return of the fever the ſwelling of the leg continues longer than it did in the preceding fit; and after ſeveral returns the ſwelling remains after the inflammation is entirely gone off, and now it begins to appear as if it was anaſarcous or dropſical, only that the ſwelling does not retain the impreſſion of the finger ſo much or ſo long as it will in a caſe of that ſort.

By theſe frequent returns of the fever the leg is each time more and more ſwelled, and the blood-veſſels are diſtended, the veins become varicoſe or full of knots or protuberances and the ſwelling extends downwards from the knee to the extremities of the toes; the ſkin of that leg begins to grow rough and rugged; the ſwelling ſtill increaſes, and the cellular membrane becomes very thick, hard, and callous, or even in ſome places approaching to be cartilaginous; the ſkin grows thicker and ſcaly, with great fiſſures and chops upon it's ſurface; nor do theſe ſeeming ſcales dry up and fall off, but adhere faſt, and are daily increaſed and protruded by the augmenting thickneſs of the cellular membrane, and the leg and foot are thus gradually enlarged to an enormous and unnatural bulk, and at length the leg, in ſize, ſhape, and all other external appearance, reſembles exactly the leg of an elephant, from which circumſtance the diſeaſe takes it's name.

In this condition the patient may continue many years; ſome have lived above twenty years with a leg of this monſtrous magnitude, and that too without any change either in their appetite or digeſtion, except during the returns of the fever; and all their ſecretions and functions of life have been at all other times regularly performed, as if in perfect health, nor have the patients themſelves been ſenſible of any other inconveniency but that of carrying about with them ſuch a troubleſome load of leg. This diſeaſe and bulk of leg is, as we have already obſerved, generally confined to one of them, though it is ſaid that there are ſome very few inſtances where it has affected both at the ſame time.

As this diſeaſe is ſolely produced by the fever above deſcribed, taking off that fever muſt conſequently prevent the diſeaſe if proper methods are uſed before the humours are fixed in the leg.

Though this fever is very uncertain in it's intermiſſions, and irregular in it's periods,

riods, yet it is very plainly of the intermitting kind, and does not appear to have been yet deſcribed by any author, though the ancients have mentioned a ſeventh-day fever as an intermittent, whoſe periodical returns were ſaid to be regular, but none of any longer intermiſſion; beſides the manner of this fever's going off, by an imperfect criſis as above, is ſingular and peculiar to itſelf; and under theſe conſiderations the following methods of treatment, both for the prevention and cure of this diſeaſe have been recommended.

When the ſhivering and fever has ſeized the patient, and one of his groins or inguinal glands is inflamed, ſwelled, hard, and painful, and the red ſtreak from it down the thigh to the leg appears, which are the invariable ſymptoms of the approach of this diſeaſe, and diſtinguiſh it from all other fevers, though the patient ſhould be very hot, and the fever pretty high, his pulſe quick, full, but ſoft, and though he ſhould be ſomewhat delirious, bleeding is not to be adviſed, as it hinders Nature from critically diſcharging the morbid humour upon the leg, and ſometimes turns it upon the vital parts, where it proves fatal; but in ſome particular full and ſanguine habits, where the fever is very high, the pulſe rapid, ſtrong, full, and hard, and delirium runs high, ten or twelve ounces of blood may be taken away, but not without great caution and the exerciſe of proper judgment.

But whether bleeding be thought neceſſary or not, if the patient has great ſickneſs at his ſtomach, with vomiting, or much retching to vomit, it is neceſſary to encourage this diſcharge by drinking green tea, camomile-flower tea, or warm water, and ſometimes to aſſiſt it by giving from one dram to two of ipecacuanha wine in the draughts of theſe infuſions, as it is not improbable that theſe vomitings are efforts of Nature to throw off ſome of the diſeaſed matter in that way; however, the action of vomiting will aſſiſt her to rid the vital parts of it, and caſt it off upon the leg more effectually and ſpeedily: after the operation of vomiting, an anodyne perſpirative bolus may be given with a little rhubarb, which will procure a motion or two, and may afford farther help towards diſcharging the offending humours; for this purpoſe—

> Take of rhubarb powdered, one ſcruple—of the ſaponaceous pill, ſeven grains—of camphire, five grains—of diuretic ſalt, one ſcruple—of ſyrup of poppies, enough to make the bolus. To be taken as above, drinking warm white wine whey after it freely, to promote the perſpiration.

For it is neceſſary to encourage a profuſe ſweating, and to continue it by giving ſome ſaline draughts after, and diluting plentifully with ſmall white wine whey or ſage tea, as they tend to abate the violence of the fever by cooling and ſweating, and alſo aſſiſt nature to caſt off the diſeaſed matter both in this way and in her natural channel upon the leg. But if the patient, either from too great natural weakneſs, or by having been bled too freely, is too much ſunk, and the pulſe is too weak and low, though ſtill quick, cordial and volatile medicines muſt be added to thoſe above preſcribed; and if the floating humours ſhould affect the head, the legs and feet ſhould be bathed in a warm decoction of the *viburnium*, or black ſage of the Weſt Indies; and bliſters muſt be applied to the leg uſually affected, in order if poſſible to draw the offending humour down, which may otherwiſe produce fatal conſequences.

But it may be proper alſo to obſerve, that though the matter uſually falls on the groin, and from thence into one of the legs, as we have before deſcribed, yet ſome inſtances have occurred where the arm has been affected; and in ſome very particular caſes it has ſhewn itſelf upon the upper part of the head, the ears, the back part of the neck, the lower part of the ſpine of the back, and about the region of the loins, theſe parts having ſeverally aſſumed the ſame appearance as is uſual in the leg after each return of the fever, and exactly the ſame ſymptoms have attended as when it has deſcended to the leg; and which ever limb is firſt affected, the returns are always to the ſame part of the body.

When the ſwelling and inflammation of the leg, or other diſeaſed part, is very ſevere and troubleſome, a fomentation of the following kind may be preſcribed.

> Take of the leaves of *alcea*, or yellow marſh mallow, and of *viburnium*, or black ſage of the Weſt Indies, of each three handfuls—the leaves of ſage, and the flowers of elder, of each one handful—of Venetian ſoap, half an ounce—of crude ſal ammoniac, one ounce. Mix and boil theſe ingredients in five pints of water, and add to the decoction rum and common vinegar, of each half a pint.

After the fever is entirely gone off, it may be proper to give an emetic, to remove any foulneſs that may remain on the ſtomach after the former vomiting; and after the emetic, and before the return of the fever, the following medicines may be adminiſtered.

> Take of precipitated ſulphur of antimony, two ſcruples and half—of calcined quickſilver powdered, half a ſcruple—of gum guaiacum powdered, two ſcruples—of balſam of Peru, enough to make the whole into forty pills; of which the patient may take four every night at going to reſt, drinking after it them three ounces of the following decoction.

> Take of the roots of ſarſaparilla, two ounces—of ſaſſafras, one ounce—of Virginian ſnake-root, half an ounce—of diuretic ſalt, half an ounce. Boil the whole in three pints of water till it is reduced to a quart, then ſtrain it off, and add to the ſtrained decoction, of ſweet ſpirit of nitre, one ounce—of common juniper water, two ounces. Mix, and give as above: the ſame quantity may alſo be taken every morning.

Theſe medicines having been taken ſome time, and the ſwelling and inflammation of the leg or other diſeaſed part being entirely gone off, it will be proper to give ſmall doſes of the Peruvian bark in ſubſtance, and in ſuch quantities at a time as the patient's ſtomach will bear, every three hours, waſhing down each doſe with a teacupful of camomile tea, in which from forty to fifty drops of the elixir of vitriol hath been mixed; and this courſe ſhould be continued till the patient hath taken from one ounce and half to two ounces of the bark, according to circumſtances; and then this medicine may be omitted for ten days, at the end of which time another ounce of the bark may be given in different doſes, and waſhed down in the ſame way; and a month after the ſame may be repeated, in order to guard againſt the return of the diſorder, an intent which will be conſiderably forwarded by the patient's bathing in the ſea or cold bath twice or thrice a week, and continuing it for a month or two after the diſeaſe hath totally diſappeared and ceaſed to return: and theſe methods, ſtrictly followed, ſeldom fail to remove the fever, prevent it's return, and drive off the elephantiaſis.

But in theſe climates, where the animal ſolids are relaxed by the intenſe heats, and it is no eaſy matter to prevail on the inhabitants to uſe the cold bath, or even to take regularly the medicines which are preſcribed, this diſeaſe is very apt to return, eſpecially where it has been ſuffered to proceed for a conſiderable length of time before any attempts were made to give relief; and thoſe relapſes are generally more difficult of cure than the original attack: and where the patient is of a weak, relaxed habit of body, endeavours ſhould be uſed to induce him to repeat the alterative medicines once, and the bark after it, in the months of April and November of the ſucceeding ſpring and autumn.

And by theſe means the returns of this

diſeaſe may be in moſt caſes averted, and the ſeeds of the diſorder effectually eradicated; and eaſy as is the courſe we have recommended, it ſeems aſtoniſhing that it ſhould ever be neglected, or that, to avoid a compliance with rules ſo ſimple and ſo little ſevere, men ſhould ſuffer a diſeaſe to gain ground, which can at beſt end only in amputation of the limb, though more probably in the patient's death.

And even amputation, dreadful as that expedient is, will by no means certainly ſecure the unhappy patient from danger; for unleſs the fever is alſo removed, the returns of it frequently throw the matter on the other leg, and the unfortunate ſufferer finds that he has loſt his limb without getting rid of his diſeaſe, and muſt go through the difficulties he has at ſuch a price avoided, in order to prevent it from ſeizing other parts; though at this ſtage of the diſorder it is matter of great doubt whether any endeavours that can be uſed will prove ſucceſsful.

Indeed, ideas have ſometimes prevailed of keeping open the ſtump of the amputated limb, and endeavouring to draw off the humours that way, ſo as to prevent their being thrown on any other part; but this at the utmoſt is but a very uncertain project, though in ſuch a caſe every thing ought to be tried.

Attempts have alſo been very frequently made to reduce the leg without being obliged to have recourſe to amputation; and to this end bandages, frictions, fomentations, and mercurial unctions, have been repeatedly uſed, but without the ſmalleſt proſpect of ſucceſs in any ſingle inſtance; for when it is grown to ſuch an enormous ſize, and the membranes are become ſo hard and callous, external applications will anſwer no other purpoſe than to teaze and torment the patient without affording him the leaſt aſſiſtance.

CHAP. XII.

Of the Vena Medinenſis, or Guinea Worm, of the Weſt Indies.

THIS diſorder hath alſo been called *nervus medinenſis* and *dracunculus*, and has been denominated the *Guinea worm*, becauſe the negroes from the coaſt of Africa are ſubject to it, and frequently bring it in their legs to the Weſt India iſlands.

Though this appearance has from it's reſemblance been called a nerve or vein, yet it is really a worm of a white colour, except the head, which is blackiſh; it's ſhape is round, long, ſmall, and uniform, like a nerve, or a piece of white round bobbin, and not broad and flat, as it has been ſometimes repreſented. It is moſt commonly found lodged in the legs or thighs, though ſometimes in other parts of the body, in or immediately under the cellular membrane, or where that membrane expands itſelf between the muſcles, where it inſinuates itſelf and is extended to a great length, being uſually from one to two feet and a half long. It does not cauſe much pain till near the time that it is ready to come out, when the part where the head of the worm is ſituated begins to ſwell, throb, and be inflamed and painful, like a ſmall boil. When this boil breaks, the head of the worm, which is of a blackiſh colour, is thruſt out at firſt, and ſoon after more of it comes forth and hangs down the leg, till it is extracted in the manner which we ſhall deſcribe hereafter.

This diſeaſe proceeds chiefly from drinking the water of ſtagnated ponds in hot countries, after droughts and ſultry hot ſeaſons, wherein the eggs of this worm, or the minute and newly animated breed of it, are contained: it is frequent in Arabia, Perſia, and the Eaſt and Weſt India iſlands, where there are ſome ſtagnate waters, by drinking or bathing in which this worm is commonly generated.

In the cure of this diſeaſe it has been adviſed to give aloetics, to haſten the protruſion and excluſion of the worms; when the little tumors where the head of the worms are begin to appear and ſwell, the ſuppuration ſhould be forwarded with cataplaſms or other applications, and when the tumors break, the end of the worm being thruſt out, it may be tied to a piece of lead, made in a long form, and about half a dram in weight, that the worm may not contract and draw itſelf in again; round this piece of lead a little of it ſhould be rolled every day till it is entirely extracted; but the ſurgeons in the Weſt Indies uſe a ſmall piece of ſilk, cotton, or lint, inſtead of the lead, about which they roll daily an inch or more of the worm at a time till it is all extracted; taking great care not to break the worm, which is a very neceſſary caution; for if it is broken, it is exceeding difficult, and ſometimes impoſſible, to recover the end again; in which caſe an abſceſs, or rather many abſceſſes will be formed, not only at the place of the worm's appearance, but all along the whole winding channel where the dead putrified worm remains, which ſometimes degenerate into bad ulcers, and give the patient much trouble and a great deal of pain.

Giving aloetics, or rather worm-medicines, to diſlodge and haſten the extraction of theſe animals, is unqueſtionably uſeful; but as theſe medicines act more immediately on the firſt paſſages than the fleſhy parts and ſurface of the body, the following coarſe compoſition has been found to be much more efficacious.

Take quickſilver, and the root of garlic, of each one ounce—of black pepper, half an ounce—of camphire, two drams. Infuſe theſe a few days in a quart of common ſpirit of wine or brandy; ſtrain it off, and of this infuſion let the patient take from one ſpoonful to two, according to age and conſtitution, two or three times a day.

The ſubtle, volatile, pungent parts of this, compoſition ſo ſtimulate and affect theſe worms, that they generally endeavour to make their eſcapes, and draw themſelves towards the ſurface of the body for that purpoſe, where a ſmall tumor forms under the ſkin, in which they collect, coil themſelves up, and die; and the tumor being opened they are eaſily taken out whole; and not only the worm which firſt appeared, but all the other worms of the ſame ſort which are in the body, do the ſame, and may be taken out in the ſame manner where they appear; and where the worms are thus taken out, the places from whence they were extracted, being not much more than ſkin-deep, ſoon heal up with the aſſiſtance of any common digeſtive, and no farther uneaſineſs remains, but the patient enjoys as good a ſtate of health as he did before.

CHAP. XIII.

Of the Leproſy of the Arabians, in the Weſt Indies.

THIS dreadful diſeaſe was firſt brought to the ſugar iſlands by the negroes from Africa, and is undoubtedly a native of that quarter of the world, as well as of Arabia, and is not an original diſeaſe of this weſtern part of it; nor was it ever known here before the importation of negroes, among whom it is now too frequent in the Weſt India iſlands, and has made it's way into many familes of white people alſo: nor are there any effectual means to prevent it, but by ſuch reſtrictions on the communication with the ſick, as are much more eaſily adviſed than followed.

This terrible diſeaſe generally ſeizes the patient gradually, ſlowly, and in a manner inſenſibly, at a time when he ſeems to be in perfect health, without ſickneſs, pain, or any uneaſineſs; nay, often without the patient's knowing that he is indiſpoſed, till an obſervation is made, moſt probably by ſome other perſon, that numerous ſpots begin to appear in various parts of his body. Theſe ſpots are at firſt of a yellowiſh brown colour, and ſoon after begin to turn to a kind of browniſh purple in white people, and to a copper colour in the negroes; and they uſually firſt appear on the forehead and chin, and continue to increaſe by degrees, both in number and magnitude, for many weeks, or even months, the patient ſtill remaining unconſcious of any diſeaſe: and as theſe ſpots increaſe, the ſkin on and near thoſe places begins to thicken in different parts unequally, and then grows ſtrait, rough, and full of hard ſcales, eſpecially on the face, arms, and legs, with a numbneſs and difficulty of moving the fingers and toes. Theſe ſcales are not like thoſe of the diſeaſe which has been called the leproſy of the Greeks, nor do they drop off like the ſcales of that diſorder; in this, the hairs on all the parts of the body gradually fall off and become thinner, the breathing by degrees grows difficult, and the voice hollow, guttural, and a little hoarſe; the breath is alſo continually fœtid and offenſive; the lobes of the ears become thick and full of knots; the cheeks large, and ſometimes full of ſmall tumours, as are alſo the forehead and eye-brows; the chin is dilated, and all theſe parts become of a livid reddiſh colour; the urine is thick and foul, like that of cattle; the mind is alſo agitated, and the ſleep diſturbed with frightful dreams, like thoſe who are melancholy; and ſome are ſuddenly awaked out of their reſt by a kind of ſuffocation, which comes on them ſo ſuddenly and violently, that they are obliged to leap out of bed. All who labour under this diſeaſe have frequent and ſtrong diſpoſitions to venery. Knotty veins of a blackiſh colour, and warts or knotty puſtules, are obſerved to riſe about the root of the tongue, under the eye-lids, and behind the ears. All theſe ſymptoms gradually and ſlowly increaſe, and grow worſe as the diſeaſe advances, and the body becomes lean and deformed; while the face, calves of the legs, and the feet ſwell, and the latter are moſt commonly cold and numbed. Thus the diſeaſe continues to gain ground many years; when the noſtrils or lower parts of the noſe become thick and full of ſmall tumours, the cartilage which divides it is corroded and waſted away, or falls down, and the whole figure of that feature becomes thick and flat, ſo that the noſtrils are in a great meaſure obſtructed, and the patient's voice is ſtill more hollow, and ſeems to proceed from the belly: at this time the lips grow thick, and are turned out; the eyes are preternaturally round at their internal angles, and the whites of them become yellowiſh, thick, and hard, almoſt like the nails of the fingers. When the diſeaſe has continued long, ſo that the eye-brows and eye-lids are grown thick, hard, and callous, the hairs fall quite off from them, as well as from the chin, and are replaced by a few others, but much more thinly ſcattered; the ears at laſt become ſharp at the lower extremities, and are drawn down and partly eaten away; the fingers and toes are greatly ſwelled, and crack with dry fiſſures, and are ſometimes ſo puffed up, that they ſeem to have totally loſt their natural forms; the muſcles are waſted all over the body; and the face is ſo disfigured, with ſuch tumours and knots as have been before deſcribed, that it appears horridly deformed, ſo as to have been compared by the ancients to the fancied likeneſs of a ſatyr, or to the face of a lion: from which imaginations they gave this diſeaſe the names of *ſatyriaſim* and *leontiaſim*. And now, when the diſeaſe is arrived at it's laſt ſtage, the voice is exceeding hollow, virulent ulcers affect the hands and feet, and ſometimes ſome other parts of the body, and the ſkin and part of the fleſh on the feet is entirely deprived of all ſenſation, ſo that if you pierce them with a needle, or ſcald them with boiling water, or even apply a red-hot iron to them, they are not ſenſible of any pain; and at laſt the humours all become ſo very acrid, that a ſmall fever ariſes, which ſoon carries off the miſerable patient.

Theſe are the general ſymptoms which attend this loathſome diſeaſe; not that every patient who labours under it has every one of theſe ſymptoms, but ſome have more and others have fewer of them, though in general they have much the greater part of them ſooner or later; and in this wretched condition they are often doomed to drag on a life of miſery even for a number of years. How happy are the inhabitants of ſuch a climate as that of England; where this diſeaſe, and ſeveral others equally dreadful and fatal, are altogether unknown!

From the ſtricteſt enquiry, and the moſt accurate examination of the ſymptoms and nature of this diſeaſe, as alſo from anatomical diſſections, it appears, that the cellular membrane is the ſeat of it, which membrane it follows almoſt into every part of the body, even into the very bones, ſome parts of which are ſwelled, hardened, and rendered uſeleſs by it; whilſt it corrodes, conſumes, and eats away other parts, eſpecially the cartilages, and ſometimes the very bones themſelves, when it becomes inveterate.

Hence it appears, that when the diſeaſe has continued a long time, and the humours are rendered ſo acrid as to corrode the bones, and almoſt deſtroy the human frame, no remedies whatever can poſſibly cure it.

But if the diſeaſe be taken in time, that is to ſay, at the beginning and firſt appearance of the primary ſymptoms, which are the ſpots above mentioned, we have ſufficient reaſon to believe it may be cured; and, indeed, there have been many inſtances of it.

And notwithſtanding the ſeat of the venereal diſeaſe is allowed to be chiefly in the expanſions of the cellular membrane, as well as the diſorder of which we now treat; yet it appears from experience, that the methods of treatment and the means of cure, muſt be totally different. For the venereal diſeaſe, mercury is almoſt in every caſe preſcribed with ſucceſs; but in this ſpecies of leproſy, it is ſo far from being beneficial, that it cannot be uſed at all without bringing on danger, and aggravating every ſymptom, at leaſt after a while; for the diſorder ſeems at firſt to yield to mercurial medicines, though it returns with redoubled violence: but, on the contrary, antimonials, the beſt preparations of which are known to be little efficacious in the removal of venereal taints, are found to be the beſt medicines which can poſſibly be given in the diſeaſe now before us.

When the ſpots which we have deſcribed firſt appear, either of a brown, yellowiſh, or purple colour, they ſhould be carefully inſpected, to aſcertain whether they are really the ſymptoms of this particular diſorder, or ſuch other ſpots as ſometimes appear on the ſkin in this climate without being of any material conſequence; and having aſcertained the nature of theſe appearances, theſe ſpots may be anointed gently with a little of the oil of tartar, procured *per diliquium*, or by ſolution in the air, which ſhould be ſoon after wiped clean off, not ſuffering it to remain long on the ſpot: if after this the ſpots diſappear without returning again, they are not leprous ſpots; but if they remain without being materially affected by this application, though the patient may be well in all other reſpects, and may remain ſo for months after, yet there is no doubt but the ſpots are of the leprous kind, and the cure ſhould be immediately attempted before the diſeaſe gains farther ground, for the only probability of it's being effectually removed is by taking it in the very early ſtages.

If the patient is of a full and ſanguine habit, it will be neceſſary to take away twelve or fourteen ounces of blood; after which a vomit of emetic tartar ſhould be given, to be worked off with moderate draughts of camomile tea.

The patient may then begin a courſe of the following medicines, which ſhould be perſiſted in for a conſiderable length of time.

Take of the precipitated ſulphur of antimony, three drams—of calcined quickſilver finely powdered, thirty grains—of gum guaiacum powdered, three drams—of oil of ſaſſafras, twenty drops—of balſam of guaiacum, as much as will make the whole into a maſs; which may be divided into ninety pills, three of which are to be taken every night at going to reſt, drinking after each doſe fifty drops of the following tincture, in three ounces of the decoction hereafter preſcribed.

The tincture.

Take of antimonial wine, two ounces—of aromatic tincture, half an ounce. Mix, and take as above.

The decoction.

Take of the roots of ſarſaparilla, three ounces—of the bark of ſaſſafras, one ounce. To theſe add three pints of water, and boil it till it is reduced to a quart; let it ſtand till cold, then ſtrain it off, and add to the ſtrained liquor, of tincture of antimony, one ounce—of compound juniper water, one ounce and half—of ſugar, enough to make it palatable. Mix for a decoction, to be taken as above. Three ounces of it may alſo be taken every morning with fifty drops of the above tincture.

And theſe medicines muſt be continued regularly for two or three months, or longer, if the ſpots do nor entirely diſappear ſooner, for the patient ſhould perſevere in the uſe of them for ſome time after they are quite gone off: and during this courſe of medicines the ſpots ſhould be well rubbed once or twice a day with a warm flannel cloth, which has been firſt held over the fumes of burning ſulphur with which a little antimony hath been mingled.

If the diſeaſe does not abate, and the ſpots, deadneſs, and numbneſs, remain undiminiſhed; it is ſometimes neceſſary to repeat the antimonial vomit two or three times during this courſe; eſpecially when the diſeaſe is hereditary, or proves very obſtinate: and it may be neceſſary alſo to repeat the whole courſe over again two or three months after the diſorder ſeems to be in a great meaſure conquered; in the next ſpring or autumn, however, or both, if the leaſt ſymptoms then appear, as no diſeaſe is more obſtinate or difficult to cure. And as the infectious matter, eſpecially when it is hereditary, is apt to lay dormant without ſhewing any ſymptoms or remains of the diſeaſe for a whole year, or ſometimes even years, and then breaks out and ſhews it's malignity afreſh, it is abſolutely neceſſary to repeat this courſe of medicines in the ſpring and autumn of ſeveral ſucceeding years; for too much caution cannot be taken againſt ſo loathſome and dreadful a diſeaſe.

Or, inſtead of the exact courſe above preſcribed, ſomewhat of the following kind may be given.

> Take of crude antimony finely powdered, one ounce and half—of ſoluble tartar, diuretic ſalt, and prepared millepedes, or wood lice powdered, of each half an ounce—of preſerved ginger, half an ounce—of ſyrup of ſulphur, a quantity ſufficient to make the whole into an electuary, of which the patient may take the ſize of a nutmeg night and morning; drinking after it the decoction and tincture above preſcribed.

As to regimen, it is not only neceſſary that the patient ſhould live temperately, but there are ſeveral things which are extremely hurtful in this diſeaſe, from which he muſt be reſtricted.

He muſt abſtain totally from pork and hog-meat of every kind, and as much as poſſible from all fat meats, and every thing that is oily or greaſy, and that not only during the courſe of the medicines, but for many years after the diſeaſe has diſappeared; nor is it at any time adviſeable for thoſe who have been ſubject to this diſeaſe to indulge in theſe kinds of food.

Any other ſorts of fleſh meats, which are not fat, much ſalted, or high-ſeaſoned, may be eaten freely at dinner; but they ſhould be ſauced with only their own gravy, and accompanied with plenty of vegetables: ſuppers of animal food ſhould be avoided; and, upon the whole, this part of the diet ſhould be light, ſimple, and eaſily digeſted.

The patient ſhould be extremely ſparing in the uſe of wine or ſpirituous liquors of any kind; nor muſt any ſort of malt liquor be admitted, all drinks of that compoſition being improper in hot countries, as they are too viſcid and glutinous, and require more labour and exerciſe than can be well uſed in theſe climates to digeſt them; for, as the great heat occaſions proportionable perſpiration, theſe liquids are carried into the blood too ſoon, and in too crude a ſtate, and often do much injury: ſmall punch, moderately acid, is a much more proper beverage for hot climates. The breakfaſts and ſuppers ſhould be ſoft, mild, and diluting.

And however rigid and ſevere theſe rules may ſeem to be, they are abſolutely neceſſary, if the patient is obliged to continue in a hot climate, and yet deſires to recover his health, and live free from this dreadful diſeaſe. It is highly probable that removing into a colder climate may conſiderably contribute to his recovery, and to the re-eſtabliſhment of his health; as is generally the caſe with diſeaſes which are bred in a hot climate and occaſioned in any degree by the temperature of the air.

By the methods above preſcribed, this diſeaſe hath often been averted, and ſometimes cured, when it was taken before it had been too far advanced, and too deeply rooted in the conſtitution, and before the whole maſs of the fluids was too much contaminated: after it has been ſuffered to proceed without interruption, and the whole habit is vitiated, all the preſcriptions that can be offered will fail of ſucceſs.

CHAP. XIV.

Of the Leproſy of the Joints, in the Weſt Indies.

THIS ſort of leproſy, when it firſt appears, ſeizes the patient in the ſame manner, and with the ſame ſymptoms, as that which we have deſcribed in our laſt chapter, ſo that for a conſiderable time it remains doubtful which of the diſorders it will prove to be; for in this diſtemper, alſo, when the patient thinks himſelf perfectly well, ſuperficial ſpots of a yellow, brown, or copper colour, with a caſt of purple in white people, and of a dark brown, or copper colour in negroes, firſt appear in different parts of the face, eſpecially about the noſe, and ſoon after on ſeveral parts of the body; at firſt without any uneaſineſs or roughneſs in the ſkin, or any ſenſe of pain, and often without the patient's diſcovering any ſort of indiſpoſition, till the ſpots are mentioned and pointed out to him by others: theſe ſpots ſpread by ſlow degrees, and increaſe both in number and magnitude till they cover a conſiderable part of the body, and yet with very little uneaſineſs or pain; and thus they continue gradually and ſlowly to increaſe, for ſeveral months, and ſometimes years, and then the fingers and toes begin to be numbed, and gradually but ſlowly to ſwell, eſpecially at their ends, and the nails are curved inwards, which appearances plainly prove it to be this kind of leproſy. And all theſe ſymptoms become more aggravated by ſlow degrees, till the fingers and toes begin to ulcerate. The ulcers are very ſmall, never digeſt, nor are much inflamed, but generally look dry, without much foulneſs or matter; but they gradually creep on from one joint to another, and corrode the ligaments, tendons, nerves, and all the veſſels to the very bones, but without any conſiderable degree of pain, all the parts being benumbed, and almoſt deprived of ſenſation: and one joint being by this means in a manner ſeparated from the limb, ſoon drops off, and the ulcers creep on to the next; and ſo on, till all the fingers and toes are corroded and fallen off; it then attacks the joints of the next ſet of bones, either of the hands or feet, but before it has corroded all thoſe, it ſeizes the trunk of the body alſo, and breaks out into ſmall ulcers, with dry ſcabs in the arms, legs, and moſt parts of the body. And now the diſtemper becomes infectious, if it was not ſo before; which is ſo doubtful a matter, that the dangers of contagion ſhould be carefully guarded againſt from the firſt ulceration. Theſe ſmall ulcers never penetrate deep into the muſcular fleſh of the body, but ſpread and extend themſelves on the ſurface in the cellular membrane, and diſcharge a little thin, acrid humour, which dries up into ſcaly ſcabs, and emaciates the patient away, ſometimes in two or three years time, but it is often much longer before it puts an end to his miſerable life; there are even inſtances of patients who have ſtruggled with this loathſome diſeaſe for ten or fifteen years, or more, the ſymptoms continuing to increaſe, but ſo ſlowly that their only hope of relief hath appeared too diſtant.

The method of cure in this muſt be the ſame as in the other kind of leproſy; for it is equally remarkable in both, that all mercurials, however prepared (except the calcined quickſilver, given in ſmall doſes as an alterative, with antimonials, as before) greatly aggravate all the ſymptoms, and increaſe the diſeaſe: if the diſorder is taken in time, at it's firſt appearance, and treated with antimonials in the ſame manner as in the other leproſy, great hopes may be entertained of a happy recovery; but when the diſeaſe is hereditary, and derived from parents, or has been neglected too long, till the joints have begun to fall off, and all the fluids are corrupted and infected, no remedies yet known, however powerful and efficacious, will prevail againſt this cruel diſeaſe.

CHAP. XV.

Of the Yaws, in the Weſt Indies.

THAT diſeaſe which the negroes in Africa, and the inhabitants of the Weſt Indies, from them, call the *yaws*, is a native of that quarter of the world, and indigenous there and in Arabia; from the former it was firſt brought by the negroes into America and it's iſlands.

This is a diſtemper which has been well known for many ages in Africa, and ſome of it's neighbouring countries which are ſituated within the torrid zone.

We are credibly informed, that the yaws ſeldom fail to attack the negroes in Africa at one time or other of their lives, but that children and young people are moſt frequently affected with it; and that they very rarely or never have it a ſecond time, if they have been perfectly cured the firſt, either in their native country, or by the negro doctors after they have been brought to the Weſt Indies; for the negroes have by long obſervation and experience found out methods of curing this diſeaſe with the cauſtic juices of certain eſcharotic plants, externally applied, and giving the juice or decoctions of others internally, which they keep as a ſecret from the white people, but preſerve among themſelves by tradition, and with theſe juices they ſometimes perform extraordinary cures both in this and ſome other diſeaſes.

This diſeaſe generally makes it's firſt appearance without any previous ſickneſs or pain, and when the patient thinks himſelf perfectly well, in very ſmall pimples, not bigger than the head of a ſmall pin, which are ſmooth and level with the ſkin; theſe daily increaſe, and become protuberant puſtules; ſoon after, the external ſkin turns whitiſh, cracks, and rubs off, and a very ſmall quantity of a whey-like or clear humour iſſues, which dies and becomes white; but the puſtules neither contain matter nor any conſiderable quantity of the thin humour, only a pretty thick white ſlough appears, and under that, pieces of a red fungous fleſh thruſt themſelves out of the ſkin, which gradually increaſe to different magnitudes, ſome not ſo large as the ſmalleſt wood-ſtrawberry, ſome larger, and others exceeding the ſize of the largeſt mulberry; which laſt they much reſemble, being red, and compoſed of little round knobs as they are. Theſe fungous excreſcences appear indifferently on all the parts of the body, but moſt frequently and generally are the largeſt about the groin, private parts, fundament, under the arms, and in the face; and it is remarkable, that in general, when the yaws are very large, they are fewer in number; and that, on the contrary, when they are more numerous, they are generally ſmaller in ſize. As the yaws are thus increaſing and coming to their height, the black hairs which grow out of the places where the yaws are, gradually turn to be perfectly white, like the hair of an old man, and the humour which oozes out of the excreſcences,

ſcences, drying upon the ſkin, makes that appear of a whitiſh colour alſo, and renders the patient diſagreeable and loathſome to the ſight. And now this diſeaſe is alſo very infectious to thoſe who handle or cohabit with ſuch as are afflicted with it.

All this time the patient neither loſes his appetite, fleſh, nor ſtrength, and ſeems in all other reſpects to be in good health, being free from any pain or uneaſineſs, but what the diſagreeable naſtineſs of the ſores, and a little tenderneſs occaſions; for they are not painful unleſs they are roughly touched or rubbed.

The time from the firſt appearance of this diſeaſe in the before mentioned ſmall pimples, to the full height of it, is very different in different conſtitutions, as they are ſtronger or weaker, and according to the negroes being well fed, or the contrary: for, when the negro patient is luſty, ſtrong, of a full habit, and has had plenty of good food, the yaws will often arrive at their full growth, and be as large as a mulberry in a month's time from their firſt appearance; but when he is weak, low in fleſh, and poorly fed, the yaws will be ſmall, and often no larger than a ſtrawberry at the end of three months.

This diſeaſe is known to be infectious; but there is alſo a peculiar aptitude in ſome conſtitutions to receive it more readily than others; and there may probably be a diſpoſition in the ſame perſon to receive the infection more readily at one time than at another, as has been obſerved of the ſmall-pox.

The deſcription we have given is that of the true natural appearance of the diſeaſe, when it is left intirely to nature, and is neither retarded nor haſtened by medicines, nor altered by external applications; and it will continue in this ſtate a long time without any material change, if it is wholly diſregarded. Nor is it eaſy to gueſs what would be the conſequence if it was ſuffered to proceed without any medical applications, as no caſe has ever been mentioned where no endeavours were uſed, nor any attempts made to cure it; but it is moſt probable, that the funguſes in the yaws would in time become ſuch ulcers as would corrode and eat away the fleſh, even to the bones, and then produce knots or knobs, exfoliations, and rottenneſs in them, and at laſt totally conſume and deſtroy them, as it does when the diſeaſe is injudiciouſly treated, and the cure attempted without ſucceſs: for when this is the caſe, and the patient has taken a conſiderable quantity of mercury, or has been ſalivated too ſoon in the diſeaſe, and eſpecially by unction, before the morbid matter was ſufficiently caſt out to the ſurface of the body; or if the matter has been repelled by that or any other means, though the ſkin may have been ſufficiently cleared by theſe methods; yet the diſtemper not being effectually eradicated and cured, it will return again, and then it becomes exceeding difficult to cure. And if it has made ſeveral of thoſe returns, and has been repelled, and has at laſt broke out in malignant ulcers, and corroded the bones, it is too often incurable; but if the diſeaſe be judiciouſly treated at the firſt, it hardly ever proves dangerous, and the cure is very ſeldom attended with much difficulty.

There is a vile cuſtom which prevails among the ſurgeons of the Guinea ſhips; that, upon the firſt appearance of the yaws, during their voyage from Guinea, they apply ſome ſtrong repellants to them; ſuch as the juice of roaſted limes, mixed with the ruſt of iron and ſulphur, or gunpowder; by which they drive back the diſeaſed matter into the blood, where it's acrimony is increaſed, though their ſkins are rendered clean by it for a ſhort time: they then rub them with palm-oil, which makes them ſoft, and look well, and in this ſtate they are impoſed upon the planters for ſound, healthy negroes; but in a few days or weeks after they are purchaſed, the virulency of the diſeaſed matter being increaſed by the retention, and the heat of the body, the yaws break out afreſh, much worſe than ever, and it is then very difficult, if not impoſſible, to cure the diſorder.

As this diſeaſe proceeds from a peculiar kind of infectious matter, which is firſt generated in, and is indigenous to the hot climate of Africa; and which Nature, when ſhe acts in the moſt ſalutiferous manner, always caſts out on the ſurface of the body, when her operations are not obſtructed by injudicious or ignorant practice; it conſequently follows, that our endeavours to cure, ſhould be firſt directed to aſſiſt Nature in the expulſion of the morbid matter to the ſurface of the body, that as much of it as poſſibly can, may be diſcharged that way; and then to deſtroy that part of it which cannot be ſo diſcharged, but remains lodged in the funguſes and ulcers, together with thoſe excreſcences, by the uſe of proper eſcharotics.

As ſoon, therefore, as the pimples begin to appear, let the negro be confined in a houſe or room ſeparate from any others; or if it is not yet certain, whether it be the yaws, or a ſort of itch, which the negroes call in their language *crocrow*, as they much reſemble each other at their firſt appearance, though they differ greatly ſoon after; let the negro be confined or ſeparated for ſeven days, and then look on him again: and in this time it may moſt commonly be determined with certainty, whether it be the yaws or not; if it be, it will be neceſſary to give ſome ſuch medicine as the following, to aſſiſt Nature in haſtening the expulſion of the diſeaſed matter, and bringing the yaws to their full growth.

Take of Æthiop's mineral, one ounce and half—of crude antimony powdered, one ounce—of Venice treacle, one ounce—of camphire powdered, one dram—of ſyrup of ginger, enough to make the whole into an electuary; of which the patient may take the quantity of a large nutmeg, night and morning, drinking after each doſe a draught of whey, with forty drops of the antimonial wine; and this medicine ſhould be continued till the diſorder is at the height.

And it may be certainly known that the yaws are arrived at their full height, when they are at a ſtand, and neither increaſing in their number nor magnitude: and at this period it is a proper time to begin to give mercurials, to raiſe a ſpitting; which is much better done, in this diſeaſe, by giving calomel daily, than by unction, as there is ſome danger, that the latter may carry the diſeaſed matter from the ſkin into the maſs of blood again; neither is it prudent to apply any mercurial ointments to the yaws for the ſame reaſons. But the beſt method is, to give five or ſix grains of calomel, twice a day, till a moderate ſalivation is raiſed, and the patient ſpits a pint and a half every twenty-four hours, and never to raiſe it higher; for few patients in this hot climate can bear the ſpitting to be raiſed ſo high, without danger of ſinking under it, or bringing on ſome other bad ſymptoms. By the time that the ſalivation is raiſed to near a pint and half, the yaws are generally all covered over with dry ſcaly ſcabs, which then begin to fall off daily in white ſcurf or ſcales, and uſually in ten or twelve days time more, leave the ſkin ſmooth, ſoft, and clean: and as ſoon as the ſcabs are fallen off, and the ſkin begins to cleanſe, it will be proper to deſiſt from giving any more mercury, and the ſalivation ſhould be permitted to go off gradually of it's own accord; or if it continues too long, a doſe of rhubarb, or ſome other gentle cathartic, will effectually check it.

It frequently happens, that after the yaws are in general gone off, and healed, and moſt part of the ſkin is become ſoft and clean, that one or more large yaws will ſtill remain, and will continue to riſe high, and appear red, knotted, and moiſt, diſcharging a little of the thin humour; this is uſually called the maſter-yaw, from it's being bigger than any of the reſt: but it is by no means neceſſary to continue, or repeat the ſalivation, which is always attended with the worſt conſequence, to carry off theſe few excreſcences; all that is required being to deſtroy thoſe yaws ſo remaining, and all fungous fleſh, with gentle eſcharotics; and then to heal and cicatrize the place with any common digeſtive.

Some uſe the lunar cauſtic, and ſome a ſolution of a dram of corroſive ſublimated mercury, in an ounce of rectified ſpirit of wine, and gently touch the remaining yaws with a feather dipped in this twice a day, till they are all conſumed; and others prefer blue vitriol, or a mixture of one dram of red corroſive mercury, with half a dram of burnt allum powdered; and this laſt is the gentleſt and ſafeſt application, and at the ſame time full as effectual as either of the others.

During the uſe of theſe eſcharotics, it is neceſſary that the patient ſhould take ſomething of the following nature, in order to expel any remaining diſeaſed matter, as well as to prevent any of it being repelled into the blood, by thoſe external applications, and to correct the acrimony of the humours, ſweeten the blood, and reſtore the patients to perfect health.

Take of Æthiop's mineral, one ounce and half—of crude antimony powdered, one ounce—of Venice treacle, half an ounce—of gum guaiacum powdered, three drams—of common ſyrup, enough to make the whole into an electuary, of which the patient ſhould take a quantity equal to the ſize of a large nutmeg night and morning, drinking after it a large tea-cupful of a decoction of the roots of ſarſaparilla and ſaſſafras-wood, to each draught of which forty or fifty drops of the antimonial wine may be added.

The methods we have preſcribed generally ſucceed, even in the moſt numerous and worſt kind of yaws, provided they have not been tampered with, and the morbid matter too often, or too effectually repelled; or the diſorder has not been miſmanaged in other reſpects: but if after giving the firſt medicines, the yaws ſhould not appear to be very numerous, or of a bad kind, and by their arriving at maturity early, it may be concluded, that the morbid humours are effectually expelled; giving theſe following medicines, and uſing the laſt eſcharotic powder as above, will commonly cure them effectually, without ſalivation.

Take of precipitated ſulphur of antimony, two drams — of calcined quickſilver, reduced to a very fine powder, twenty-four grains—of gum guaiacum powdered, two drams — of camphire, half a dram — of balſam of gum guaiacum, enough to make the whole into a maſs; which ſhould be divided into ſeventy pills, three of which may be taken night and morning, drinking after each doſe, the decoction of ſarſaparilla-root and ſaſſafras-wood, with the antimonial wine as above preſcribed.

It ſometimes happens, that after the patient is cured, and all the yaws are entirely gone, and the ſkin, in every part of the body, except the ſoles of the feet, is perfectly ſoft, ſmooth, and ſound, that tumours, or little hard ſwellings will remain on the parts laſt mentioned, which are painful, and ſo very ſore, that the patients can neither ſtand up, nor walk, nor even bear them to be touched, without great pain. This proceeds from yaws riſing on thoſe parts, and the ſkin there being very hard, callous, and thick, from their going bare-foot, ſo that the excreſcences cannot puſh through; but this is eaſily remedied by bathing the feet in warm water, and paring off the callous ſkin, after which the yaws will appear and puſh themſelves out, when they may be ſoon deſtroyed by the above eſcharotic powder, and the place cured as in the maſter-yaw.

But, as we have already obſerved, the worſt circumſtances attending this diſeaſe, ariſe from a wrong method of treating it; either by the uſe of ſtrong repelling applications, or by too haſtily giving mercurials, and bringing on a ſalivation, before nature has ſufficiently expelled the morbid matter to the ſurface of the body, which is generally the caſe when ſhe is not obſtructed by wrong treatment and medicines, returning the morbid matter into the blood again; in which caſe it falls upon ſome other excretory paſſages, by which it never can be carried off, but is caſt upon various parts of the body where it produces the moſt malignant kind of ulcers, which when they can be come at, are either exceeding difficult to cure, or are ſometimes incurable; or if it falls upon the bones, brings on gnawings in the limbs, with violent nocturnal pains like thoſe which attend the venereal diſeaſe; and at laſt produces nodes, enlargements, and rottenneſs of the bones, which are in time entirely eaten away, and the patient after continuing a long time, ſometimes years, in this miſerable condition, at laſt dies benumbed and inſenſible. This is a moſt deplorable caſe; but if it be taken when the external ulcers firſt appear, and before the pains in the bones, and other ſymptoms come on, it may ſometimes be cured by the following method, which has been known to ſucceed when even a ſalivation has failed: though that may, indeed, be tried; but if it does not bring the ulcers to digeſt and heal, it will be adviſeable not to proceed farther, but to give the pills laſt above preſcribed, by doſes of three at a time night and morning, waſhing down each doſe with the decoction of ſarſaparilla and ſaſſafras, and the drops of antimonial wine, and aromatic tincture, as directed for the leproſy of Arabia.

The ulcers may be dreſſed with the following.

> Take of yellow baſilicon, one ounce—of red corroſive mercury, finely powdered, one dram—of burnt allum powdered, half a dram. Mix, for a digeſtive balſam.

And when the ulcers are clean and begin to heal, or tend to cicatrize, they may be dreſſed with the following, till they are perfectly healed and well.

> Take of common plaſter, with gums and red lead, of each half an ounce—of red corroſive mercury, two ſcruples—of burnt allum powdered, half a dram. Mix for a plaſter.

But when the bones are affected with knobs, and are become rotten, and are in part eaten away; which moſt commonly happens to ſuch bones as are of the moſt ſpungy nature, as thoſe of the hands, fingers, feet, and toes, and the ſpine of the back and joints of the other bones, the caſe is incurable; nor will amputation avail, even when it is in the hands, feet, or in ſuch parts where that operation can be performed; becauſe the humour will ſoon fall upon ſome other parts, and produce the ſame effect.

CHAP. XI.

Of the Impetigo, or Ring-Worm, in the Weſt-Indies.

THE *Impetigo*, is a diſeaſe of the ſkin, which was anciently well known to the phyſicians of Greece and Arabia, and is more or leſs common ſtill in moſt other nations, though in the colder and more northern climates it is uſually ſo mild, and ſo eaſily cured, that it is of very little conſequence.

But it is ſo frequently met with in the Weſt India iſlands, and in that part of the continent of America, which is ſituate within, or near the torrid zone, that it may be ſaid to be indigenous to thoſe climes, where it is a diſeaſe troubleſome, diſagreeable, painful, and difficult of cure.

Some of the firſt voyagers into this part of the world, found the original natives of theſe iſlands ſubject to a diſeaſe of the ſkin, which might be either this or another kind very much reſembling it, and which the natives call a *cowrap*; and they have a tradition among themſelves, that one of the ſeven people that were created when the world was firſt made, was a cowrap.

From this tradition we may conclude, that it is a diſeaſe almoſt as ancient among them as the race of mankind; but it does not appear that they had any of the diſeaſes which are indigenous to Africa, and have been imported with the negroes from that quarter of the world to theſe weſtern parts of it, though it is as warm here as in Africa.

This diſeaſe appears without any previous ſickneſs, or pain in any part of the body, ſometimes in one part, and ſometimes in another; at firſt in many ſmall puſtules, or pimples, cluſtering together, moſt commonly in or very near a circular form, of the bigneſs of a ſixpence or a ſhilling, of a reddiſh colour, and each puſtule containing a ſmall quantity of clear acrid ſaline water; but they ſoon ſpread, ſometimes to be as large as the breadth of the hand, or broader, and itch moſt intolerably, eſpecially upon the patient's putting off his cloaths at bed time, and that frequently to ſuch a degree that human reſolution is unable to reſtrain his hands from ſcratching, or rubbing the pimples briſkly, which breaks the ſmall puſtules, and the acrid humour oozes out and occaſions a heat and ſmarting, after which it dries upon the ſkin, and forms whitiſh ſcales or ſcabs, which fall off again upon being rubbed or ſcratched, and are daily renewed in the ſame manner, with the ſame ſymptoms of itching: thus theſe eruptions increaſe and ſpread to various parts of the body; ſometimes leaving one part of it, and removing to another, without any remedies being applied; and in this ſtate the diſeaſe will continue for years, and probably would remain during the patient's life, if not relieved by proper remedies.

This is truly a diſeaſe of the ſkin, and is apprehended by ſome to be contagious, and probably may be ſo, in the moſt virulent ſtate of it, and whether it ariſes from ſmall worms ſomewhat different from thoſe which cauſe the itch, or is occaſioned by the heat of the climate, it produces the effects which we have before deſcribed; and when the diſeaſe is ſuffered to continue long, as it is ſometimes for years, the humour diſcharged becomes ſo very acrid, that it corrodes the parts affected deeper, and expands them larger, and at laſt degenerates into a *herpes exidens*, the moſt corroding and virulent of all eruptive diſeaſes, which is in truth only a more malignant degree of the impetigo.

And for the cure of this diſorder mercury alone can be depended on; and though it has been ſuggeſted by ſome, that evacuations, ſuch as bleeding and purging, may be neceſſary, before mercury is adminiſtered internally, or applied externally; yet unleſs a fullneſs of blood indicates a neceſſity for them, they are neither of any ſervice in this nor in moſt other diſeaſes of the ſkin; and purging may divert the mercurials from the ſurface, where they are intended to act, towards the inteſtines, and ſo become prejudicial.

If the diſeaſe is recent, and has neither continued long, nor ſpread much, nor the humours become very acrid, it is moſt commonly very eaſily cured, even with ſulphur, either mixed with a little ſimple ointment, or with a plaſter of diapalma applied to the parts affected; or if thoſe parts are waſhed with a lotion made of the root of white hellebore, and a ſmall quantity of white vitrol infuſed in water, and a few doſes of milk of ſulphur taken inwardly at the time of uſing them, this courſe will probably be more effectual; but if the diſeaſe has been neglected, and has continued a long time, ſo that it is become inveterate, and the humour or water which is diſcharged is become very acrid and corroſive, or where it is degenerated into the *herpes exidens* as before deſcribed, it is difficult to be cured; and the application of ointments, lotions, or any repelling medicines externally, without giving proper internal medicines at the ſame time, may be attended with bad conſequences; for ſome who have injudiciouſly made uſe of ſuch repelling applications, have turned that acrid humour upon the bowels or lungs, or on the vital parts, where it has produced very fatal effects.

And though the ſlight preſcription abovementioned may cure this diſeaſe in ſome conſtitutions, and when it is moderate and recent; yet when it has been of long continuance, and the humour is become very acrid, and the conſtitution bad, remedies of a more powerful and active nature are required, and ſomething of the following kind has been found ſucceſsful.

Take of calcined quickſilver, finely powdered, one ſcruple—of precipitated ſulphur of antimony, four or five ſcruples—of gum guaiacum, powdered, one dram—of balſam of guaiacum, as much as will make the whole into forty pills, of which the patient may take two every night at bed-time.

Take of antimonial wine, one ounce—of the aromatic tincture, half an ounce—Mix, and let the patient take ſixty drops of it every morning, in a large tea-cupfull of the decoction of ſarſaparilla-root.

And when the conſtitution of the patient is tolerably good, but the diſeaſe inveterate, he may take the ſame draught and drops after the pills at night alſo; and after he has taken theſe medicines ſeven or eight days, he may begin to anoint the parts affected with the flowers of a ſhrub well known in the Weſt-India iſlands by the name of the *French guava buſh*, either whole as they grow, or reduced in a mortar to a fine pulp, every other night, till he has uſed it four or five times, and continue the uſe of the above pills and drops at the ſame time; and if any appearance of the ſpots remain or return, he may touch them with a very little of the ointment again, till they are perfectly well; and if theſe pills and drops move the belly more than once or twice a day, it will be right to give half a grain of opium, with each doſe of the pills, or ſo much as may be found neceſſary to ſtop the purging, in order that they may be carried into the circulating fluids, and have their proper effects upon them, to correct and alter the acrid humours.

The Spaniards have preſcribed as a noſtrum for the cure of this diſeaſe, the *terra macke-mackee*; and the French have pretended to cure it with an infuſion of the white helleborer-oot, with a little alkaline ſalt in water, and a little milk added to diſguiſe it; and ſeveral ſpecificks of the like kinds have been ſtrongly recommended by others; but they all in general prove ineffectual, except in a chance caſe, where the diſeaſe is moderate and recent.

However, it will be for the good of the public in theſe parts, to recommend the uſe of the flowers above preſcribed, which are frequently found in thoſe iſlands, and have been proved by repeated experience, to be much more effectual in the cure of this very troubleſome, though ſeldom dangerous diſorder, than any of the abovementionedno ſtrums, and to have ſucceeded when the mercurials in various forms have failed, though the uſe of them ſhould always be attended with the adminiſtration of the foregoing internal medicines.

CHAP. XII.

Of a Particular kind of Palſy, peculiar to the Eaſt Indies, called the Barbiers.

THE inhabitants of theſe countries are much afflicted with a troubleſome diſorder which they call the *Beriberii*, (a word ſignifying a *ſheep*;) a denomination which it has probably received, becauſe thoſe who are ſeized with it, from a tottering of the knees, and a peculiar manner of walking, exhibit to the fancy, a repreſentation of the gait of that animal. It is a ſpecies of palſy, or rather a tremor; for at the ſame time that it impairs the ſenſation of the feet and hands, and ſometimes even of the whole body, it induces a trembling. The principal cauſe of this diſeaſe, is a thick, viſcid, glutinous humour, which ſeizes the nerves in the night; when people, after being fatigued by the heat of the day, in thoſe fervid climates, imprudently neglect to cover themſelves with proper bed-cloaths; and it is peculiarly prevalent after a rainy ſeaſon, which is conſtantly the ſtate of the weather in this climate, from the beginning of November till May.

In this diſorder, the limbs ſeem to be lengthened, rather than ſhortened, the phlegm inſinuating itſelf into the joints, ſo as to relax the nerves and ligaments. In general, the diſeaſe approaches ſlowly; but upon a perſon's drinking a large draught of the milky liquor of the cocoa-nut, which, from it's very agreeable taſte and cooling quality, is much eſteemed in theſe countries, when he is heated, by labour or exerciſe, the attack of it ſometimes follows ſuddenly; in the ſame manner as large draughts of ſmall-beer, or other weak liquors, affect thoſe in Europe, who take them when they are heated by running, or any other violent exerciſe, with diſeaſes which are frequently productive of the extremeſt danger.

The chief ſymptoms of this diſeaſe are, a laſſitude of the whole body; the motion and ſenſation, eſpecially of the feet and hands, are languid and depraved; and a titillation is commonly felt in theſe parts, ſimilar to that which remains after a limb, which has been numbed by the cold, is reſtored by the fire or friction, but with this difference, that the ſenſation in the barbiers is more painful; and the ſpeech is ſometimes ſo much obſtructed, that the patient can hardly pronounce a ſyllable articulately. Beſides theſe, there are many other ſymptoms, which, however, all confirm the exiſtence of a cold and viſcid humour.

The cure of this diſorder is generally very tedious, the humour being difficult to reſolve. For the moſt part, however, it is not mortal, unleſs it ſeizes the muſcles of the breaſt and ſtomach, and thereby ſtops the reſpiration. Lying in bed ſhould be avoided as much as poſſible; and the patient ought to walk, ride on horſeback, and uſe all the more violent kinds of exerciſe; from that of running, the diſeaſe itſelf will prevent him. Strong frictions, even to pain, are abſolutely neceſſary, and theſe are very conveniently performed by the ſlaves. Fomentations and baths, made of the privet of the Eaſt, are alſo extremely advantageous: this herb reſembles the water-pepper in the leaf, and is of a ſweet and aromatic flavour; it is not ſo much uſed in medicine as camomile and melilot, but is thought to excel them in it's diſpellent and reſolving quality. The feet and hands ſhould be anointed with oil of cloves and mace, mixed, however, with oil of roſes; for the former, when applied alone, are too cauſtic, and eaſily excoriate the ſkin. Beſides theſe, an excellent kind of naphtha is brought from Sumatra, which is called, by the Indians, oil of earth, and like the naphtha, known in Europe by the name of *oleum petræ*, ſprings out of the earth, or oozes into lakes and rivers from the contiguous rocks. This oil is held in ſo much eſteem by the Barbarians, that the King of Achen, the moſt powerful prince in that iſland, has prohibited the exportation of it, under pain of capital puniſhment; ſo that when any foreign veſſel viſits any of the ports of that coaſt, it is common for the inhabitants to bring it ſecretly to the ſhip by night for ſale. This oil, when rubbed upon the parts affected by the barbiers, affords wonderful relief. It has a dull, but not diſagreeable ſmell; and the genuine naphtha, or oil of earth, is eſteemed one of the fineſt and moſt penetrating of all the bituminous ſpecies: but what is imported into Europe, under that name, is ſaid to be ſophiſticated, or is rather a compoſition of the cocoa-nut and medicated earths.

If the diſorder is chronical, and of long ſtanding, nothing is more effectual than decoctions of china, and ſarſaparilla roots, and the guaiacum wood; which, by their mild and friendly warmth, ſoften and ſeparate the cold viſcid humours, and diſcharge them by ſweat and urine. During this courſe, however, proper purges ſhould be interpoſed; among the beſt of which, are extracts of aloes and gamboge.

Bleeding is hurtful; for the fault lies not in the quantity, but the quality of the humours; and the blood is the fountain of heat, and the ſource of animal life.

To complete the cure, medicines which promote ſweat and urine, and ſtrengthen the nerves, ſhould be adminiſtered; ſuch as Venice treacle, mithridate, and the like; to which muſt be added, conſtant exerciſe.

The Indians have a method of putting the patient into a hole dug in the ground, and covering him with ſand up to his neck. This is performed in the middle of the day, and he remains there as long as he can bear the heat of the ſand. Camphire, with the decoction of guaiacum wood, have been found beneficial in the barbiers: but nothing is ſo likely to promote the cure, as a removal into another air; without which expedient, the patient generally continues paralytic for months, in ſpite of all the efforts of ſkill, and the moſt powerful nervous medicines.

This diſeaſe is moſt violent and frequent on the Malabar coaſt; where, eſpecially during the months of December, January, February, and March, it attacks thoſe who unwarily ſleep expoſed to the land winds, which iſſue every morning about ſun-riſe, from the neighbouring mountains; ſuddenly ſeizing them with a painful ſenſation in the perioſteum, or membrane which covers the bones of the arms and legs. In ſome perſons, the pain abates as the day advances, and the ſun warms the air; but in others, it receives no alleviation, even by day, and is attended with a weakneſs of the knees, and uneaſy ſenſation in the calves of the legs and ſoles of the feet, eſpecially on any attempt to walk. Medicines have little effect on this diſeaſe till after the ſhifting of the monſoon, unleſs the patients can be removed to the coaſt of Coromandel, or to any place on the eaſtward of the Balagat mountains, where, by the change of air, they quickly recover.

CHAP. XIII.

Of the Spaſm, in the Eaſt Indies.

THE diſorder of the *ſpaſm*, almoſt unknown in Europe, is ſo common in the Eaſt Indies, that it may be reckoned among the endemial diſeaſes of the country. The attack of it is ſometimes ſo ſudden, that the ſubjects of it become in an inſtant as rigid as ſtatues; while the muſcles, either of the anterior or poſterior parts of the body, are involuntarily and violently contracted: a diſorder which, without any primary defect of the vital or natural functions, quickly ſends the wretched ſufferer, in excruciating torments, to the grave; totally deprived of the capacity of ſwallowing either food or drink. There are, likewiſe, other partial ſpaſms of the limbs, but theſe are more gentle and temporary.

Thoſe who are affected with this diſorder, look horribly in the face of the by-ſtanders, eſpecially when what is called the cynic ſpaſm comes on; and both the cheeks are drawn in convulſion towards the ears. A red and green colour is reflected from the eyes and face; the teeth gnaſh; and inſtead of the human voice, a rude ſound iſſues from the throat, and ſeems as if it was heard from a ſubterranean vault; ſo that to thoſe unacquainted with the diſorder, the perſon appears to be poſſeſſed.

In this diſeaſe plentiful bleeding was formerly thought proper; but though apparently neceſſary for preventing the conſequences which may ariſe from ſo violent and general a conſtriction of the muſcles, yet it is affirmed from experience to be rather of prejudice than utility, unleſs the patient is of a full and ſanguine habit, or the diſorder is attended with a fever,

Frictions and ſtrong ligatures are of conſiderable uſe, as alſo embrocations of oil of mace, mixed with oil of aniſe or roſes, or oil of turpentine and Indian ſpikenard, which the iſland Java produces in abundance: large cupping-glaſſes, without ſcarification ſhould likewiſe be applied to the neck, loins, ſhoulders, and breaſts, by which a repulſion of the thin and bilious humour will be made from the muſcles and nerves.

If by theſe applications the violence of the paroxiſm ſhould abate, and the patient recover the power of ſwallowing, antidotes ſhould be adminiſtered in a liquid form, which may correct the poiſonous quality of the humours, and evacuate them by urine or ſweat; ſuch are the bezoar-ſtone and ſhavings of the horn of the rhinoceros, mixed with Venice treacle or mithridate; antimonial emetics will alſo be proper, in ſuch ſtrength and frequency as the particular circumſtances of the diſeaſe, and the ſituation of the patient may direct: and this diſeaſe is ſo rapid, acute, and dangerous, that it admits of no procraſtination. And every poſſible method of cure ſhould be carried into immediate trial: but if it increaſes, or the original attack is ſo violent, that the patient is incapable of ſwallowing medicine, the belly ought to be opened by clyſters of the moſt ſtimulating kind, ſuch as the following.

Take the Eaſtern privet above-mentioned, yellow mallow, and marſh mallow, of each one handful—aniſe-ſeed, fennel-ſeed, cummin-ſeed, and dill; or ane-tſeed, of each two drams. Boil theſe in as much water as will ſtrain to a pint; and add to the ſtrained liquor, of coloquintida, or bitter apple, powdered, half a dram—of ſal ammoniac or nitre, one dram—of oil of dill-ſeed, three ounces—and of the following electuary, one ounce. Make a clyſter.

To make the electuary.

Take of guaiacum wood, one pound—of ſarſaparilla, four ounces—of the bark of guaiacum wood, one ounce and half. Bruiſe theſe ingredients, and let them boil twenty-four hours in a ſufficient quantity of river water; ſtrain it, and whilſt it is boiling hot, add of the leaves of ſenna, ſix ounces—of polypody, three ounces—aniſe-ſeeds and fennel-ſeeds, of each one ounce and half—of black hellebore, ſix ounces—of all the myrabolans mixed, and pulp of tamarinds, of each one pound. Let it boil up again, and then ſtrain it a ſecond time, and afterwards add to it, of the pulp of the *caſſia fiſtula*, or pods of the pudding-pipe tree, ſix ounces—of ſenna-leaves, powdered, and powdered rhubarb, of each five ounces—of the bark of guaiacum wood, powdered, two ounces—of white ſugar, enough to make the medicine palatable—and of the electuary of ſcammony, one ounce to every pound of this electuary.

After this clyſter, thoſe parts of the patient's body which are principally affected, ſhould be anointed with the oils we have mentioned above, and in particular the oil of earth; and baths and fomentations ſhould be made of the eaſtern privet, and the leaves of a ſhrub, called davullontas, which grows to the height of a man, with a leaf divided in the edge, and in flavour nearly reſembles balm: theſe leaves have an anodyne and ſpecifick kind of quality, and are peculiarly adapted to this terrible diſorder, aſſuaging the racking pain which ariſes from the contraction of the nerves. Beſides the herbs here mentioned, the ingredients commonly uſed in Europe for emollient fomentations, with the addition of Venice treacle, have been found highly advantageous, and even preferable to bathing the extremities, though that has been ſtrongly recommended by ſome authors.

It is almoſt unneceſſary to remark, that fomentations ought in all caſes to precede the uſe of ointments.

The ſal prunella, taken inwardly, is incomparably uſeful, evacuating the bilious matter by a plentiful flow of urine, and gently cooling the blood where any feveriſh heat is attendant; but, above all, particular regard is to be had to the violence of the pain, which is ſo urgent a ſymptom, that anodyne applications are of more immediate neceſſity than thoſe which affect even the cauſe of the diſorder; for that purpoſe, liquid laudanum is extremely proper, as likewiſe mithridate and the extract of ſaffron. And though the uſe of opiates has been condemned as injurious to the nerves by their ſtupifying quality, yet this objection is ill-founded; for, beſides that the great heat of the climate authorizes the uſe of theſe medicines, it is certain, that without recourſe to them, in caſes of ſuch urgent extremity, the patients could not poſſibly ſurvive, whilſt other means could be tried: add to this, that the opiates uſed in the eaſt are ſo duly prepared, that they may be ſafely adminiſtered, even to infants; and, in fact, were it not for theſe valuable medicines, we might abandon every phyſical application in all the hot diſeaſes of this country; an aſſertion which, however unwarrantable it may appear to thoſe who are unacquainted with the practice of this part of the globe, will be found by experience to be perfectly juſt; and is indeed confirmed by the unanimous teſtimony of modern practitioners; and the rectitude of this practice is ſo clearly aſcertained, as to juſtify the moſt reſolute and liberal preſcription of opiate medicines that occurs in any phyſical diſpenſation. We have already obſerved, in treating of the *tetanus* of Europe and the Weſt Indies, that authentic caſes of various ſpaſms are recorded, wherein a ſcruple of opium has been adminiſtered in the ſpace of twenty-four hours; which, though it ſuſpended for a time, and a periodical repetition of it in the end overcame the diſeaſe, neither occaſioned a ſtupor, nor procured an uninterrupted ſleep of three hours: muſk, likewiſe, has been joined to opium, with great ſucceſs; and a caſe of the *opiſthotonos* at Haſlar Hoſpital, near Portſmouth,

mouth, has been mentioned, in which opium and camphire laid to the feet, inſtantly and repeatedly removed the ſpaſm, which always returned with it's former violence when the application was withdrawn.

In regard to the regimen, it is a matter of no great importance, for the extreme violence and rapid progreſs of the diſeaſe ſupercede all deliberate proceedings, but when the violence of the paroxiſm begins to abate, broths made of chickens and veal ſhould be uſed, in which cardamoms and tamarinds, both of which are produced abundantly in Java, have been boiled, and theſe broths will ſerve as a medicine as well as for food.

And upon the whole this diſeaſe appears to be ſo perfectly analogous to the opiſthotonos of the Weſt Indies, that we may refer our readers for the farther ſymptoms and treatment of it, to the chapter on that ſubject in the preceding part of this work, premiſing only that the management and medicines preſcribed in the preſent chapter are peculiarly adapted to that ſpecies of this diſeaſe, which ariſes from cold, and not altogether to thoſe which are occaſioned by wounds or punctures.

CHAP. XIV.

Of the Colera, Diarrhœa, Dry Belly-ache, and Dyſentery, of the Eaſt Indies.

THE *colera* and *dry belly-ache* are very common diſeaſes in hot climates, and may be termed original; and among a number of patients, before a fever or flux becomes epidemic, ſometimes one of theſe diſeaſes attacks, and ſometimes another: ſome are afflicted with the colera, ſome with the diarrhœa, and others with the ſymptoms of bilious colic or dry belly-ache; and if theſe diſeaſes are neglected in the beginning, fruitleſs ſtraining, gripes, and conſtant bearing down to ſtool come on, and the caſe at laſt terminates in a true dyſentry.

As theſe diſeaſes are not only analogous, but merely depend on the ſame cauſes, the principal endeavour for a cure in all of them, is to evacuate the bilious redundancies in the ſtomach and bowels; in doing which, regard muſt always be had to the original diſeaſe. In a colera, it would be dangerous to give any medicines, with this intention, more ſtimulating than pukes with camomile tea, emollient clyſters, and magneſia; and afterwards the cure will depend, in a great meaſure, on a liberal uſe of opium.

In the bilious colic, or dry belly-ache, it is ſometimes neceſſary to bleed; and, after this evacuation, the ſame means of cure may be uſed as in the beginning of a flux: for here alſo the ſtomach ſhould be cleanſed by gentle vomits; the belly ſhould be kept open by mild laxatives; and the pain muſt be abated by opiates, clyſters, fomentations, and the warm bath. A dyſentery for the firſt two or three days frequently reſembles a ſimple purging; but as ſoon as the mucus, or ſlime, is waſhed off the bowels, the gripes, and inclination to go to ſtool, become violent, and the pulſe grows conſiderably quicker; the ſtools are ſmall, ſlimy, and often bloody; and unleſs the progreſs of the diſeaſe is prevented by proper applications and management, it grows worſe, by degrees, till it either proves fatal, or becomes in a manner chronic. In low, ſwampy, and other unhealthy ſituations, when epidemic fevers rage, the dyſentery is very dangerous. It begins with great rapidity, ſeeming to be rather a ſymptom of the fever, than an original diſeaſe; and this kind of flux has been juſtly conſidered by the moſt eminent medical writers, as the ſame diſeaſe affecting the inteſtines. But as it greatly alters the preceding ſymptoms of the prevailing fever, and differs, in ſome reſpects with regard to the cure, it may be proper to give a deſcription of a putrid dyſentery, which ſometimes happens in the Eaſt Indies in the ſickly ſeaſons.

The diſeaſe, for the moſt part, begins with laſſitude, ſlight ſhivers, diſorder at the ſtomach, and bilious vomiting. At firſt it exactly reſembles a fever, but the paroxiſms do not run ſo high; and the patients are not ſo apt to rave. In a day or two, ſometimes earlier and ſometimes later, the dyſenteric ſymptoms make their appearance, and are attended with extreme loſs of ſtrength, and depreſſion of ſpirits. If there have been any remiſſions of the fever at firſt, they now diſappear; the ſkin continues hot, the pulſe is ſmall and quick, the tongue very foul, and the patients are frequently troubled with hiccup.

When the patient makes timely application for aſſiſtance, the fever and gripes are carried off in a few days; and, in general, the diſeaſe is either removed, or becomes chronic. If it is neglected at the commencement, the ſymptoms are daily aggravated; the tongue becomes quite black, and the teeth are covered with a clammy tough ſlime. The nauſea, hiccup, and gripes, are very ſevere; the ſtools ſmall, frequent, and exceedingly putrid, accompanied with a continual bearing down, and ſometimes a protruſion of the gut at the fundament. The frequency of the ſtools ſoon brings the patient to extreme weakneſs, and his countenance becomes inexpreſſibly ghaſtly.

As ſoon as a mortification ſeizes the bowels, the gripes and other painful ſymptoms ſuddenly vaniſh; but the nauſea, hiccup, and vomiting, ſtill continue: the pulſe becomes more ſmall, quick, and fluttering; the ſtools paſs off inſenſibly, and are intolerably offenſive; and at this period, in moſt caſes, twitchings, tremblings, and delirium, are added to the other ſymptoms.

At this ſtage alſo of the diſeaſe, it is no uncommon caſe for the patient to vomit a naſty thin matter, tinging the linen and bed cloaths black. Some have puſtules on the legs, arms, and breaſt, filled with a watery matter, which degenerates into black putrid ſores. At laſt, the pulſe fails; the extremities become cold; and the patient, after remaining for ſome days almoſt inſenſible of his miſerable ſituation, generally expires in the act of going to ſtool, exceedingly emaciated.

In ſome patients, the dyſenteric fever, through the whole courſe of the diſeaſe, has regular remiſſions; in others, it is accompanied with a pain in the region of the liver, a troubleſome cough, and a vomiting of thick and glutinous ſlime. The delirium is in very few caſes conſtant, the ſenſes and judgment recurring at intervals.

The duration of the dyſentery is various; at Bengal it frequently proves fatal in a few days; in China, if the caſe is neglected, it ſeldom exceeds ſeven or eight; and in moſt places it is not often protracted beyond the ſixteenth day, unleſs it aſſumes a chronic form, and then the diſeaſe will ſometimes terminate fatally after a month, or even ſix or ſeven weeks.

Bleeding has been generally eſteemed abſolutely neceſſary in the beginning of moſt fluxes; and when there is a conſiderable fullneſs, or when the diſeaſe is accompanied with an inflammatory fever, this evacuation is undoubtedly calculated for the relief of the patient, as it operates to reſtrain the hæmorrhage. But in hot climates, where moſt fluxes are either of a chronic nature, or accompanied with a putrid fever, the ſtrength of the patient decreaſes from the commencement. When blood appears in the ſtools, (which, however, is not always the caſe) it is the moſt evident ſymptom of a diſpoſition to waſte away, and a tendency in the humours to putrefaction is apparent;

for the hæmorrhage ſeems to be rather owing to the diſſolution, than to too great a quantity of the circulating fluids; and the inteſtinal inflammation appears to be occaſioned by the acrid matter contained in them. Leſſening the quantity of blood would only ſerve to impair the patient's ſtrength, and though it might not immediately prove fatal, would at leaſt precipitate his fate; and in the few caſes which have ſeemed to require bleeding, the operation, though performed early in the diſeaſe, has not appeared to afford the ſmalleſt relief.

Emetics are unqueſtionably extremely ſerviceable in the early ſtages of the diſeaſe, and the moſt effectual are either emetic tartar combined with ipecacuanha, or a few grains of the former diſſolved in a decoction of tamarinds; and the laſt form is to be preferred if the patient is feveriſh. In either of theſe ways, this medicine proves not only a powerful emetic, but by acting as a purge, relieves the troubleſome teneſmus, or bearing down to ſtool.

Purgatives are of equal conſequence in this diſeaſe; but though they are required to act powerfully, care ſhould be taken that they do not ſtimulate too much; and, on this account, the neutral purging ſalts anſwer beſt: and of this claſs of medicines, glaubers and the common purging ſalts, and in particular the latter, are found to operate with moſt eaſe and effect. As the frequent repetition of theſe medicines is in moſt caſes neceſſary, they ſhould be rendered as palatable as poſſible; yet every addition which alters their eaſy purgative qualities ſhould be avoided with great care; manna, which is very commonly given with ſalts, contributes to render them nauſeous, and occaſions a griping during the operation.

The beſt correctors of ſuch bitter ſaline purges are cream of tartar, lime-juice, or brandy, which alſo takes off great part of the nauſeouſneſs; and this is undoubtedly a matter of ſome importance, where there is an abſolute neceſſity to continue them for a length of time; beſides that in putrid caſes, ſuch additions will be conducive to the cure.

The caſtor oil, when properly prepared, and not grown rancid by keeping, has been alſo found to be one of the beſt purges in the dyſentery, as it ſeems to be poſſeſſed of an anodyne quality, bringing relief to the painful gripes as ſoon as taken. Nor does it ever fail to procure copious ſtools, and to relieve the bearing down.

Rhubarb in conſiderable quantities, and accompanied with calomel, for want of other purgatives, has been ſometimes tried; but during the operation of theſe medicines the gripes are generally augmented, and the troubleſome bearing down to ſtool is ſeldom or ever mitigated; and in the putrid flux of theſe warm climates, calomel is certainly a very improper addition to any purgative; and repeating it ſo often as theſe medicines become neceſſary in the courſe of this diſeaſe, muſt certainly add to the putrid tendency, and produce very bad conſequences: nor is this a matter of mere ſpeculation, but an obſervation founded on experience; for in the epidemic prevalence of theſe fluxes, when the patient has been on the recovery, but ſtill in a convaleſcent ſtate, ſo much has the blood been diſpoſed to diſſolution, that a few doſes of mercury, given for ſome urgent venereal ſymptoms, have not only brought on a troubleſome ſalivation, but likewiſe a return of this diſeaſe.

But though rhubarb purges do not anſwer in the beginning of fluxes, yet when theſe diſeaſes have been of long continuance, and have in a manner become chronic, a doſe adminiſtered now and then, at proper intervals, with the intermediate uſe of ſtrengtheners, often produces the beſt effects.

In the flux at Bengal, and places of like ſituation, when the patients continue long in the convaleſcent ſtate, rhubarb often proves of great ſervice, particularly when five grains of the powder, or a dram of the tincture, is preſcribed to be taken in a glaſs of wine before dinner; but in bad caſes, a decoction of bark and elutheria ſhould be preſcribed at the ſame time.

Ipecacuanha in ſmall doſes has been accounted a ſpecific for the cure of the dyſentery, and the qualities of cauſing a perſpiration, relieving the gripes, and opening the belly, have been commonly aſcribed to it; and though in colder climates it may really poſſeſs them, yet in theſe warmer ones, it has been frequently tried with very little advantage; a few grains of it will keep up a nauſea, and prove extremely troubleſome; but it does not often relieve the gripes, or occaſion an eaſy ſtool; and preſcribing it in this manner, in the beginning of the diſeaſe, is litttle better than trifling with the patient. From the failure of ipecacuanha ſo much celebrated as a principal remedy in cold climates, doubts have ariſen whether it may not be injured by keeping, and whether by that and the heat it is not totally deprived of it's purgative qualities; and that this is the caſe, is the more probable, from the great authorities who have recommended it in the dyſentery, as theſe writers gave it freſh, and in that ſtate chiefly relied upon it's virtues as a cathartic.

But it muſt not be inferred, from what has been ſaid, that ipecacuanha is to be treated as an uſeleſs medicine in the dyſentery: on the contrary, when it is joined with opium, it is one of the beſt aſtringents: and when given with an intention to clear the firſt paſſages, it's purgative quality, if it is impaired, may be reſtored by the addition of a quarter of a grain of emetic tartar to each doſe. And in this laſt-mentioned form, it may be given with great hope of good effects; but when the purgatives already mentioned can be procured, they ſhould always be preferred.

The moſt uſual aſtringent medicines preſcribed in the dyſentery are, diaſcordium, philonium, and Venice treacle, or powders of the ſame compoſition called ſpecies, in the form of electuaries and confections: but when theſe medicines are ſent out from Europe to warm climates, they ſoon ferment and ſpoil by keeping; and though the ſame objection cannot be applied to the ſpecies, yet moſt of theſe are very injudicious mixtures, and neither the one or the other are to be relied on; notwithſtanding theſe antidotes, as they are called, have ſtood the teſt of ages, and have been implicitly preſcribed by one eminent phyſician after another, till their virtues have been in a manner rendered ſacred; ſo that to treat them with the contempt which they will be found on proof to merit, would be ſuch an offence againſt the medical creed, as might be productive of ſome danger. Notwithſtanding which, we cannot forbear to obſerve, that as theſe compoſitions conſiſt of an opiate and aromatic, they may eaſily be prepared on the ſpot, when ſuch medicines are judged neceſſary; and the virtues of any one of them are much exceeded by the combination of an opiate with an emetic.

After evacuations, when aſtringents ſeem proper, the extract of logwood, and the ſemi-rouba have been preſcribed; but neither of them appear to be efficacious. The firſt, however, prepared, ſoon becoming mouldy in warm weather; and the latter, not keeping better; to which, perhaps, it may be principally owing that theſe medicines ſo ſeldom anſwer. And, indeed, the only medicines which are certainly attended with any remarkable advantage, are opium and ipecacuanha, the decoction of logwood, bark, and caſcarilla, or elutheria. However, where the diſorder has been neglected at firſt, the effects of them all are very uncetain, and moſt of them, if given too early, are apt to exaſperate the diſeaſe.

From the corroborant, aſtringent, and antiputreſcent virtues of the Peruvian bark, this medicine ſeems to be well adapted for the cure of this diſeaſe; and particularly when it ariſes from the ſame cauſes which produce remitting fevers. But though it is, without doubt, poſſeſſed of virtues infinitely ſuperior to any other aſtringent, yet it is by no means ſo great a ſpecific in the fluxes, as in the fevers of theſe climates. In the putrid flux at Bengal, it has been attended with ſuch beneficial effects, that it has been found as eſſential to the cure, as evacuations by vomits and purges. At firſt, the caſcarilla may be given with great advantage; but when the ſymptoms of putreſcency run high, it ſhould be combined with the Peruvian bark, the latter being of a much more antiputreſcent nature; and this medicine may be at firſt given in decoction, and afterwards, when the ſtomach can bear it, in ſubſtance: yet even here, in many caſes, the putrefaction advances ſo haſtily, and the fæces in the bowels are ſo acrid, that notwithſtanding the uſe of opiates, the bark is carried off by ſtool before it can produce any effect, and the patient falls a victim to the diſeaſe; and in the Straits of Malacca, and in China, it has been tried, and has not only failed to produce good effects, but it has ſeemed to aggravate all the ſymptoms; nor has it appeared to be attended with the leaſt advantage, till the diſeaſe has been overcome, and nothing was wanting to compleat the cure, but to brace the relaxed internals, when it has been of ſome ſervice; though even then, in general, preparations of opium, with ipecacuanha and the decoction of log-wood or caſcarilla, has been known to anſwer better. Nor is it by any means aſtoniſhing, that all dyſenteries ſhould not derive the ſame benefit from the bark, as the nature of the diſeaſe depends greatly upon the epidemic conſtitution at the time; it muſt, however, be allowed to have this advantage above all other aſtringents, that no kind of danger attends the trial of it; but on the contrary, if it does not promote the cure, it generally prevents the diſorder from growing worſe; whereas a premature uſe of ſome of the other medicines may be productive of fatal conſequences: and the greateſt difficulty which ariſes in preſcribing the bark is, when ſymptoms of putridity in fluxes demand it's immediate uſe, and yet the bad ſtate of the ſtomach and bowels will not admit of retaining a quantity ſufficient to anſwer the intended purpoſe. Perhaps, if decoctions and infuſions of this medicine could be applied externally, it might anſwer ſome very good end; but, from the ſcarcity of it, and the high price it bears in the Eaſt Indies, it is probable that ſuch an experiment hath never been tried.

For the cure of this diſeaſe, the following general method hath been recommended as moſt effectual. On the firſt approach of the diſeaſe, the following emetic powder may be adminiſtered, which ſeldom fails to operate powerfully, and generally relieves both the ſtomach and bowels.

> Take of ipecacuanha finely powdered, five grains—of emetic tartar, one grain. Mix them well together; and if this does not operate ſufficiently in an hour, repeat it.

But if the dyſentery is attended with a fever—

> Take of the decoction of tamarinds, four ounces—of emetic tartar, from one grain to two. Diſſolve the tartar in the decoction, and give two ſpoonfuls every hour till it procures two or three ſtools.

And on the ſucceeding morning the following—

> Take of Epſom ſalts, from three drams to ſix, according to circumſtances, diſſolved in three ounces of boiling water—and add lime juice or cream of tartar, to render it palatable; and a ſpoonful of brandy occaſionally.

If this does not operate within an hour, it ſhould be repeated; and unleſs the ſymptoms, or at leaſt the gripings and bearing down to ſtool, abate, the ſame purge ſhould be given for the four following days, but in ſuch quantities only as will promote a free diſcharge by ſtool; and during this courſe, the following opiate may be taken every night at bed-time.

Take of opium, ten grains—of Caſtile ſoap, thirty grains—of ipecacuanha, ten grains. Make the whole into forty pills with common ſyrup, and take from four to ſix pills every night.

But when the irritation in the guts is violent, emollient and anodyne clyſters are neceſſary; and for this purpoſe, from ſix to eight ounces of a decoction of linſeed, or ſtarch, with forty or fifty drops of laudanum, may be injected.

But if the diſeaſe remains unabated, or if aſtringents appear to be neceſſary, ſmall doſes of ipecacuanha and opium may be occaſionally given, recourſe being from time to time had to the emetics and purges, if the gripes and teneſmus return.

When this diſeaſe is attended with any conſiderable degree of fever, the following may be given inſtead of the emetic powder.

Take of caſtor oil, from half an ounce to an ounce—of peppermint water, one ounce. Make a draught, to be taken in the morning.

As the diſeaſe abates, the following antiputreſcent aſtringent will be found uſeful to prevent putrefaction and to reduce the fever; but the evacuating medicines muſt not be diſcontinued, but uſed alternately.

Take of Peruvian-bark in powder, ſix drams—of caſcarilla, or elutheria in powder, three drams—of cinnamon, two ſcruples—of gum-arabic, two drams—of water, three-fourths of a pint. Boil till the decoction is reduced to ſeven ounces, adding the cinnamon and gum arabic towards the end of the boiling; ſtrain it off, and add of the tincture of the bark, or of Port-wine or claret, one ounce and half of this decoction, three or four table-ſpoonfuls may be taken every two hours; and, if neceſſary, four or five drops of liquid laudanum may be added, to prevent the medicine from running off by ſtool.

Though theſe continued evacuations may at firſt ſight appear ſevere, in a diſeaſe attended with ſuch ſymptoms of putrefaction and ſo great a deprivation of ſtrength; yet thoſe who are acquainted with the nature of ſuch diſorders will readily admit, that a continual fruitleſs ſtraining, and painful inclination to ſtool, will weaken the patient more in twenty-four hours, than three or four eaſy ſtools, procured in the ſame time, by a gentle laxative.

The remedies which will be found to anſwer beſt, in all fluxes indiſcriminately, are emetics and purgatives. Some objections are made to this courſe by Sydenham, in the Eſſays of a Medical Society at Edinburgh; but it may be obſerved, that purges, in the days of the judicious phyſician laſt-named, were very ſtimulating; and thoſe tried in the caſes mentioned in the Edinburgh Eſſays, conſiſted of rhubarb and calomel: had more lenient purges been preſcribed, they would, probably, have been attended with greater advantage.

The uſe of ſaline purges in this diſeaſe, was originally introduced by the judicious phyſicians of the army, during the laſt war in Germany. Theſe gentlemen, incited by a liberal ſpirit of inquiry, made many excellent improvements in the practice of medicine; and their obſervations highly merit the eſteem and admiration of the public.

The diet in this diſeaſe, ought to be of the moſt antiputreſcent kind; ripe fruit ſerves in the double capacity of medicine and food: and panada, ſago, and ſuch other light ſpoon-meats, with the addition of wine, which in caſe of any tendency to putrefaction ſhould be increaſed, together with rice, gruel, teas of emollient herbs, and toaſt and water, ſhould conſtitute the diet; but all the drinks ſhould be acidulated, unleſs the diſeaſe has been of long continuance, or the patient has been previous to the attack in a convaleſcent ſtate, in which caſe both fruits and other acids ſhould be adminiſtered with a ſparing hand.

It is of great importance to keep the air about the ſick cool and pure, during the whole courſe of the diſeaſe, and particularly on board ſhips and in hoſpitals, where many patients are often crouded together; for unleſs the parts appropriated to the reception of the diſceaſed are frequently waſhed, fumigated, and ſprinkled with vinegar, it will be impoſſible to remove the diſeaſe, or to prevent it from becoming general, by any remedies that can be given internally.

When the ſeaſon is ſickly, the habitations of the ſick ſhould be carefully avoided; beſides which, keeping the body clean will be found to contribute greatly to the prevention of this diſeaſe; it may alſo be kept open by ſmall doſes of rhubarb, and the diet ſhould be eaſy of digeſtion.

In the courſe of recovery, a relapſe ſhould be guarded againſt, by an abſtinence from all animal food, except light ſoups. But as the patients ſtrength returns, a moderate uſe of ſuch freſh meats as are of eaſy digeſtion may be allowed; and his beſt ſecurity will be, to continue taking the Peruvian bark till he is in a great meaſure reſtored to health, when the uſe of the cold bath, gentle exerciſe in a carriage, and above all, a change of climate, are the moſt effectual means to compleat the cure.

CHAP. XV.

Of the Hepatitis, or Diſeaſe of the Liver, in the Eaſt Indies.

OF all the internal parts in the human body, the liver is moſt ſubject to diſeaſe in hot climates: it ſuffers by obſtruction, inflammation, and ſuppuration.

The diſeaſe of the liver is very frequent in all parts of India; but is particularly prevalent on the coaſt of Coromandel: it may be either original, or ſymptomatic, as it ſometimes attacks in perfect health, and ſometimes accompanies or follows ſome other diſorder.

When the diſeaſe is original, it is generally attended with an uneaſy ſenſation of weight in the right ſide, under the region of the hypochondrium, or ſpleen, and uſually with a very ſharp pain about the ſhoulder or collar-bone on the ſame ſide; as the diſorder advances, the countenance grows yellow, the patient complains of ſickneſs, oppreſſion at his ſtomach, a difficulty of breathing, and uneaſineſs when he lies on the oppoſite ſide.

Theſe are the common ſymptoms of the diſeaſe; yet, on the diſſection of human bodies, ſuppurations have been diſcovered in the liver, when (from the appearances of the living patient) there have been no reaſons to ſuſpect inflammation or any other diſeaſe of this organ; it therefore often happens, that the diſeaſe is fixed, and becomes incurable, before any alarming ſymptoms appear. The yellow colour which accompanies the diſeaſe, is alſo an uncertain ſymptom, as the jaundice is always occaſioned by the paſſage of the bile into the duodenum being obſtructed; however, in moſt caſes of this diſeaſe, the countenance becomes remarkably ſallow, and if not yellow, has a tinge nearly reſembling a lead colour.

But the diſeaſe of the liver has the greateſt tendency to impoſthumation; and when the abſceſs points outwards, and the matter is diſcharged externally by inciſion, there may be ſome hope of the patient's recovery; but when it burſts into the cavity of the belly, or into that of the breaſt, by an addition of the liver to the diaphragm or midriff, the caſe is in almoſt every inſtance fatal.

In cold climates, the remedies, as in

other inflammatory caſes, are copious bleedings, cooling purges, and bliſters applied to the part affected.

But in the warmer climates of the Eaſt Indies, this treatment is found to be unſucceſsful; and as the diſorder in general proves ſpeedily fatal, mercury has been preſcribed as a ſpecific, by experienced practitioners in that part of the world: and this medicine they uſe externally upon the part, and give it internally in ſuch doſes as may bring on a ſlight ſalivation; and when this effect is produced before the formation of matter, it will generally be found the moſt certain and expeditious cure.

But however faſhionable this remedy may be, there is no doubt but the ſucceſs of it is greatly exaggerated, and the application of it much too frequent; for it is often preſcribed in ſuch ſlight diſorders of the liver, as in all probability would have yielded to a bleeding, or to gentle purging phyſic, properly repeated, and the application of a bliſter.

It is ſo ſeldom an original diſeaſe, that it is difficult to give particular directions for cure, the preceding or accompanying diſorder being always to be attended to.

If the reſpiration is difficult, the cough tickling and troubleſome, and the paroxiſms of the fever irregular; when the countenance begins to turn yellow, a change which is frequently attended with ſickneſs at the ſtomach, a retching to vomit, and pain about the collar-bone on the right ſide when the ſeat of the liver is preſſed; it will be proper to take away ſome blood, the quantity of which muſt be determined by the habit of body: a bliſter ſhould be alſo applied; and, on the ſucceeding morning, the patient may take the following laxative medicine.

> Take of manna, half an ounce—of ſoluble tartar, two drams—of common water, three ounces.

If this draught does not take effect, it muſt be repeated, and continued for ſeveral days, at ſuch intervals, and in ſuch doſes, as may ſerve to keep the body open.

On the abatement of the fever and the painful ſymptoms, the countenance frequently remains ſallow, and the patient is much emaciated; when this is the caſe, the following may be adminiſtered every three hours.

> Take of camomile flowers, ſix drams—of ſalt of tartar, three drams. Infuſe ſix hours in a pint of boiling water; ſtrain it off fine, and give a tea-cupful as a doſe.

In ſuch caſes as ſeem to demand the adminiſtration of mercurials, the following may anſwer the purpoſe.

> Take of calomel, two grains—of the ſaponaceous pill, ten grains. Make two pills, to be taken at bed-time.

And this medicine may be continued nightly till the mouth begins to be affected, when it may be omitted; and in this way the diſorder may be cured without ſalivation.

But if, during the courſe of mercury, the difficulty of breathing ſhould increaſe, or the pain in the ſide become more violent, the bleeding and bliſter muſt be repeated.

When the diſeaſe of the liver follows obſtinate fevers and fluxes, and is attended with a putrid inſtead of an inflammatory diſpoſition, mercury would be prejudicial; nor is there any method of cure which promiſes to be more ſucceſsful, for in theſe caſes the patient is generally ſo reduced by the antecedent diſeaſe, that very little hope remains of his recovery.

CHAP. XVI.

Of the Remitting Fever of the Eaſt Indies.

THIS diſeaſe occurs at all times in hot climates, but ſeldom rages epidemically, unleſs the weather has for ſome time continued cloſe, moiſt, and ſultry.

When this diſeaſe appears at ſea, where it is not affected by exhalations from the land, the fever generally approaches with laſſitude and ſhiverings, though ſometimes only with a chillineſs and pains of the back and bones: theſe ſymptoms are ſucceeded by nauſea, ſickneſs at the ſtomach, intenſe heat, violent thirſt, and pains above the eye brows; the pulſe, though ſoft, becomes very quick and full; the head aches conſtantly and ſeverely, and the patient is troubled with great reſtleſſneſs, anxiety, and oppreſſion, and in the height of the paroxiſm diſcharges great quantities of bile by vomit. The criſis of the fit is generally by ſweat, and the patient enjoys a ſhort interval of comparative eaſe, during which, however, the pulſe ſeldom returns to it's natural ſtate, and he generally complains of a bitter taſte in his mouth, giddineſs, head-ache, and want of ſtrength. In a few hours the feveriſh fit returns, which is diſcoverable by an aggravation of the ſymptoms, and is carried off in like manner by a ſweat, or ſometimes by an evacuation of bile.

If the diſeaſe is neglected, the remiſſions grow more and more indiſtinct, and the intervals ſhorter; and, ſooner or later, it becomes a continued fever, and is accompanied with many of the following ſymptoms: the tongue, which at firſt was only white and furred, grows dry and black; the teeth and lips are covered with a glutinous ſlime, and ſometimes white puſtules appear in the mouth and throat; the heat, head-ache, and uneaſineſs, are augmented; the eyes become dull and heavy, or wild and fixed; and the patient falls into a drowſineſs or delirium, attended with tremblings and twitchings. As the patient grows weak, the pulſe becomes very ſmall, irregular, and fluttering; and the heat of the ſkin changes to a cold, clammy moiſture; and if there have been no ſymptoms of putrefaction hitherto, they now appear: theſe ſymptoms, however, do not always take place; for the patient is ſometimes carried off without any evident marks of diſſolution in the blood, even though the diſeaſe has been of ſeveral weeks continuance.

In ſome caſes, inſtead of the paroxiſms already mentioned, the patient at firſt ſeems only indiſpoſed with giddineſs, head-ache, and lowneſs of ſpirits; but whilſt he is ſtill able to go about, grows always worſe towards night: and when the diſorder commences in this way, it may generally be obſerved, that the fever, in it's courſe, will be attended with greater danger, leſs diſtinct remiſſions, and more evident ſigns of putrefaction.

Theſe ſymptoms commonly characterize this fever, as well at ſea as in favourable ſituations on the land; but in low, woody countries, where the current of air is impeded and interrupted, and, in addition to intenſe heat, the air is generally moiſt, but eſpecially if there are noxious effluvia from marſhes or ſtagnant waters, the diſeaſe is more rapid, univerſal, and fatal.

But beſides theſe general external cauſes, there are alſo ſome others which ſeem to have a very powerful influence on this diſeaſe, and render it more fatal. Theſe are principally, too great an abſtinence from food, repletion from a diet compoſed chiefly of animal food, the paſſions of the mind, and contagion.

Of theſe, the two firſt are ſuch evident cauſes of ſickneſs, that their powerful influence cannot be doubted: and it is a common obſervation in this part of the world, that thoſe who have been much reduced by evacuations, and in particular by mercury, and thoſe who are great eaters of animal food, are more liable to the ſickneſs of the ſeaſon, than thoſe whoſe conſtitutions are good and who are temperate in their eating, and when ſeized have a much worſe chance to recover. Seamen, alſo, from a diet of animal food in a very improper ſtate, and the total want of vegetables, are more liable than others to diſeaſes of this kind on their arrival at unhealthy ports.

Grief, vexation, diſappointment, all the dejecting paſſions of the mind, are very powerful prediſpoſing cauſes; and prove, in a variety of inſtances, fatal to thoſe young adventurers who annually leave their native land, upon the flattering and deluſive expectations of finding mountains of gold melted into ingots for their immediate acceptance; but, upon their arrival, when they receive the mortifying intelligence, that riches here, as well as at home, are the fruits of induſtry, and not to be ſo ſuddenly acquired, become diſpirited, and yield to the very firſt attacks of diſeaſe; whilſt others, though equally unuſed to the climate, having ideas leſs ſanguine, or better proſpects, are by no means ſo liable to ſickneſs, and when they are actually ſeized by it are infinitely leſs ſubject to danger. But of all the impreſſions of the mind, none are attended with ſuch ſudden and deadly effects, as apprehenſion and panic; for, when a dangerous fever appears on board a ſhip, the alarm will frequently occaſion inſtant ſickneſs: and, upon this principle, it may not be difficult to account for the ſudden deaths, which in this country frequently happen to perſons who have been attending the funeral of a deceaſed friend; for, if the ſickneſs, as has been ſuggeſted, were occaſioned by the exhalations from marſhy burial-grounds, or putrid effluvia from the water which iſſues from the adjoining graves, the grave-diggers would be more ſubject to attacks than the attendants on the funerals; yet this is not the caſe, for it generally happens that the tender and humane ſuffer, while thoſe who are unaffected with the melancholy ſpectacle before them eſcape. But there is ſtill another and much more powerful cauſe of the putrid remitting fever.

When this fever prevails in hot climates, it ſeems at firſt to be infectious only from the conſtitution of the air, but afterwards, when the ſickneſs has ſpread itſelf, and been of long continuance, there is no room to doubt that a much worſe kind of contagion proceeds from the putrid effluvia of the ſick: this has been very evident when this fever has been epidemic among the companies of ſhips; at firſt only two or three people are affected, and thoſe in particular who have been employed in hard duty upon deck, but in a fortnight the fever will be found ſo univerſal, that ſcarce any eſcape, except the officers and thoſe who have no communication with the ſick, and the cooks who work in the galley among the ſmoke, which ſeems to be often a protection againſt this diſorder. Another circumſtance which plainly ſhews the power of contagion is, the great mortality which generally takes place amongſt the viſitors and attendants upon the ſick, few of whom can preſerve themſelves from the infection, even where thoſe they attend are placed in large commodious and airy rooms, and every preventive precaution is uſed that judgment or prudence can ſuggeſt; nay, many of the medical aſſiſtants, though their viſits to the ſick are of ſhort duration, and they arm themſelves with every antidote within their knowledge, partake more or leſs of the prevailing diſtemper.

The ſeat of this diſorder appears to be at firſt in the ſtomach; and that inteſtine which is known by the name of the duodenum, and it ſeems to be aggravated by a great ſecretion of acrid bile, though it is not clear whether this is the cauſe or effect of the diſeaſe; the head ache and delirium only appear to be ſymptomatic, and not to depend on inflammation.

This kind of fever does not ſeem to require bleeding, though it has been recommended generally by all practitioners, with a view to remove any fulneſs, to abate the fever, and to bring it to regular remiſſions; and in cold and temperate climates, this evacuation may poſſibly have ſometimes a good effect; at leaſt, taking away ſome blood in the beginning of moſt fevers, can be attended with no great degree of danger. It may likewiſe be of uſe upon firſt entering into warm weather, when many of the fevers are ſo mild as to require little other cure than to cleanſe the firſt paſſages, and to produce gentle perſpiration by relaxants; but after a ſhort continuance in a warm climate, the evacuation of bleeding is very detrimental; and, though it has been frequently tried, when it ſeemed to be ſtrongly indicated by great thirſt, head-ache, fluſhed countenance, and oppreſſed pulſe, yet it has ſeldom been known to anſwer any good purpoſe.

Antimonials have been tried in various preparations, but emetic tartar ſeems preferable to all others; and a powder, which is the moſt convenient form for common uſe, may be made with five parts of magneſia to one of the tartar; nor by this means is the emetic tartar in the leaſt robbed of any of it's virtues, which might be expected from the addition of the abſorbent: however, if after exhibiting a few doſes of this medicine, it's operation does not proceed with effect, drinking acidulated liquors, will not only render this preparation, but almoſt every other antimonial, more active.

Dr. James's powder has alſo been given; but this appears to be a much more uncertain antimonial than emetic tartar, frequently lying inactive in the ſtomach and bowels for ſeveral hours, and afterwards operating with great violence. Even when it ſucceeds, it's effects are ſo ſimilar to thoſe of emetic tartar, that the laſt may generally be preferred to a remedy the preparation of which we are in ſome meaſure ignorant of. This medicine is, however, commonly ſent out with directions to hot climates; and, when it falls into proper hands, may probably be a very uſeful one; but when given indiſcriminately, and continued for any length of time, has been thought rather to produce unfavourable than happy effects. The long-continued uſe of it may be proper in inflammatory fevers of cold climates; but the profuſe evacuations, and particularly the ſweats which it occaſions, ſeem to confirm the opinions of thoſe who hold it rather injurious in the putrid fevers of hot countries.

Febrifuge virtues of the higheſt quality have been aſcribed to the emetic tartar, when given in ſmall doſes, and in ſome meaſure very deſervedly, as a remiſſion often enſues after it's uſe; but this may be accounted for by reflecting, that during the operation of this medicine, it occaſions a ſtrong artificial paroxiſm, which at laſt is carried off by a profuſe ſweat, though the original diſeaſe may ſtill continue, and in a few hours return with as much violence as ever. It's febrifuge virtues, in hot climates, ſeem principally, if not altogether, to depend upon it's evacuating powers, and it's procuring a paſſage for the morbid humours through the ſkin, which ſometimes removes a fever juſt in the ſame way as the timely exhibition of a puke and ſweat. But when once the fever is confirmed, emetic tartar may ſometimes be given in vain, without it's appearing to poſſeſs virtues to remove it, or bring it to more regular remiſſions; and when the diſeaſe has arrived to any degree of malignity, ſuch a ſtimulating relaxant is extremely prejudicial.

Saline draughts are generally preſcribed, with a view to dilute the bile, to cauſe a perſpiration, and to bring on the fever to more regular remiſſions; but moſt fevers have this diſpoſition, and what is merely the nature of the diſeaſe, has been often conſidered as the effects of the medicine: when given in a ſtate of efferveſcence, or fermentation, they will ſometimes check a vomiting, and remove an urgent ſymptom; but when adminiſtered alone, the beſt character which can be given of them is, that they are very inoffenſive, but poſſeſſed of no ſuch virtues as will either cure the fever, or bring it to more regular remiſſions. The other medicines which have been preſcribed with the ſame intention, are Mindenerus's ſpirit, and ſpirits of nitre. Whole pints of the firſt have been given in theſe diſeaſes, without producing any ſenſible effect; and if the fevers of warm climates demand the uſe of nitre, the ſtomach of the patient will not bear it in ſufficient doſes to anſwer any good purpoſe: indeed, the preſcribing ſuch remedies, ſeems to be little other than an attempt to do ſomething; for when no other remedies are neceſſary, lemonade, and barley or rice water acidulated, (the uſual drinks of the patient) anſwer much more effectually every purpoſe for which they are intended.

Cordial medicines, and thoſe alexipharmics, which are ſuppoſed to poſſeſs the power of driving the diſorder through the ſkin, have alſo been tried; and, among them, camphire, Virginia ſnake-root, muſk, caſtor, ſalt of amber, ſalt of hartſhorn, and the powder of contrayerva; the firſt has been commonly given in the form of the camphorated julep, as it has before been preſcribed in this work, with a view to cauſe a perſpiration to relieve the head, or to abate ſome immediately violent and troubleſome ſymptoms; but it hath been ſeldom attended with any remarkable ſucceſs. In whatever way camphire is preſcribed, it is a very nauſeous medicine, and in theſe hot climates will hardly ever be retained on the patient's ſtomach in ſufficient doſes to anſwer any good purpoſe. The ſnake-root is ordinarily given in a decoction, with a ſmall quantity of Venice treacle, and has, in ſome inſtances, ſeemed to anſwer better than moſt medicines of this claſs, and to be attended with conſiderable advantage in the decline of fevers, when accompanied with a profuſe diarrhœa: however, the ſame intentions may be anſwered by much more agreeable medicines; and for this reaſon it is in a great meaſure laid aſide. Nor have any of the reſt been found very efficacious, except muſk, and the ſalt of hartſhorn. The firſt, if given to the quantity of a ſcruple every four hours, ſeldom fails to abate the hiccup, and any other nervous ſymptoms that may occur; and it likewiſe acts as a powerful cordial and perſpirative. The latter is generally preſcribed in low caſes, only as a ſtimulative, and is therefore never long continued; ſo that this claſs of medicines are not to be depended on: if they are preſcribed with a view to relieve the head, bliſters will be much more effectual; wine anſwers the purpoſe much better as a cordial; and warm fomentations, or bathing the extremities, as antiſpaſmodics and perſpiratives.

It is indiſpenſibly neceſſary, in the beginning of this fever, to cleanſe the inteſtinal paſſages by gentle vomits and purges. Nature ſeems always to point out ſuch evacuations, by the plentiful ſecretion of bile; which, if not ſpeedily diſcharged, will not fail to bring on an inflammation of the ſtomach, nauſea and hiccup; which, in the courſe of the diſeaſe, will prevent the effects of medicine, however judiciouſly preſcribed, and powerful in it's quality.

When the fever attacks ſlowly, it will be right to give a vomit of ipecacuanha, with a few grains of emetic tartar; and if this does not move the belly, a doſe of neutral purging ſalts ſhould be given the following morning.

But when the fever is epidemic, and rages with fury, no time is to be loſt; and therefore this method of evacuation is too tedious; and, in ſuch caſes, the emetic tartar may be depended on, and ſhould be given to the quantity of a quarter or half a grain every hour, till it acts by vomit and ſtool, which laſt intention is rendered more certain by the addition of manna, decoction of tamarinds, or a ſmall portion of purging ſalts. And any of theſe medicines may be given immediately after the ſhivers, as they not only tend to mitigate the feveriſh paroxiſm, but bring it to a quicker iſſue. But it ſhould be obſerved, that evacuations of this kind are not to be continued a length of time; nor muſt we expect by this means to prevent a generation of bile: for ſo long as the feveriſh indiſpoſition continues, although an emetic and cathartic are repeated every day, more will ſtill be created; but as ſoon as the fever is removed, the effect will ceaſe of courſe.

When the inteſtinal paſſages have been thoroughly cleanſed, the principal part of the cure depends on preſcribing the Peruvian bark, in as large doſes as the patient's ſtomach will bear, without paying any regard to the remiſſions and returns of the fever. If the remiſſions are perfect, the bark will have a more ſpeedy effect: but even if the diſeaſe is continued, the uſe of it effectually prevents it from growing dangerous and malignant. The bark being antiputreſcent, cordial, and never obſtructing or checking any critical ſecretion, is well adapted to the cure of fevers in hot climates. When the ſtomach is weak, it ſhould be given in decoction; but as ſoon as the patient can bear it, immediate recourſe is to be had to the powder, either in the ſaline draught, in Port wine, or in any other form that will be moſt agreeable.

But if, after all the neceſſary evacuations, the ſtomach remains weak and unſettled, which is often the caſe in bad fevers, great advantage may be derived from a doſe of ſolid opium: it ſeldom fails to remove theſe ſymptoms, and then the bark will ſit eaſy on almoſt every ſtomach. But if, on the contrary, the diſeaſe is allowed to go on, the diſorder of the ſtomach will increaſe, and other ſymptoms ariſe, which will render the effect of every medicine extremely doubtful.

The effects which are almoſt certainly to be expected from the bark are, a gentle, equal ſweat, and a looſe ſtool: if it does not produce theſe effects, and eſpecially if the ſymptoms indicate an overflow of bile in the firſt paſſages, laxatives ought to be joined with it; but if it runs off by ſtool, it is abſolutely neceſſary to check the evacuation, by a few drops of laudanum in each doſe.

Happily for mankind, the many frivolous arguments which have been long urged againſt the uſe of the bark, are now obviated, by the united conſent of the moſt ingenious phyſicians; yet there ſtill remains one great prejudice, which prevents the more general adminiſtration of it: when a fever has clear and diſtinct remiſſions, all practitioners agree in preſcribing it; but if the diſorder aſſumes a continued form, means are tried to bring on regular remiſſions; and if this cannot be accompliſhed, and the patient's ſtrength begins to ſink, bliſters, cordials, and ſweating medicines, are employed to ſupport him. The uſe of the bark, in ſuch a ſituation, would be thought highly dangerous, and has, therefore, been cautiouſly prohibited by moſt of the medical writers ſince Sydenham. But in hot climates, it has been proved by experience, that this objection is without foundation, and that the bark may not only be given with the greateſt ſafety, both in the remiſſions and the paroxiſms, but even when the diſeaſe becomes actually continual.

The regimen of the patient requires great attention, the diet ought to be of the moſt antiputreſcent kind; ripe fruit anſwers very well, both the intention of food and medicine. The panada, ſago, and other diet on board ſhip, ſhould be acidulated, or the drink may be rendered agreeably tart, by cream of tartar, or elixir of vitriol. If the patient begins to be exhauſted,

hauſted, and his ſtrength fails, he ſhould be freely ſupported with wine in his drink, food, and medicines; his linen ſhould be frequently ſhifted, and his apartment ſprinkled with vinegar, and kept as cool and clean as poſſible. If he ſhould earneſtly deſire cold water, which is often the caſe, he may be indulged in it freely, as it will be found to dilute, perhaps, better than any other drink that can be prepared; and it cannot be doubted, but many lives have been ſacrificed to the cruel, though friendly practice, of refuſing a patient the gratification of his ſtrong cravings: very happy effects have often followed the indulgence of them; and if what is longed for ſhould be very improper, ſo much of it will never be taken as to do any harm. It has been remarked, that on board of ſhip, porter, punch, cheeſe, and ham, are moſt frequently deſired by the ſick in fevers; and though theſe may appear of all things the moſt improper, yet the allowance of them has often given a favourable turn in very deſperate caſes.

Moſt, if not all, of the dangerous diſeaſes of hot climates, particularly fevers, depend upon a diſpoſition in the fluids to putridity; the diet ſhould, therefore, at all times, but more eſpecially during the rage of ſickneſs, be ſuch as will correct this tendency; and, for this reaſon, vegetables ſhould bear the greateſt proportion. Violent exerciſe, expoſure to the heat of the ſun, and to the chilling and unwholeſome dews of the night, ſhould be carefully avoided; for they are ſuch certain cauſes of ſickneſs in hot climates, that thoſe who are expoſed to them have little reaſon to expect an exemption from dangerous indiſpoſitions.

Theſe are neceſſary cautions; but, beſides theſe, keeping the ſtomach clean, a moderately generous uſe of wine, and the bark taken daily during the ſickly ſeaſons, are great preſervatives.

And, under the obſervation of theſe directions, it may be affirmed, that the lives of many Europeans would certainly be ſaved, who are annually carried off by the diſeaſes of hot and unhealthy countries, and in particular by the fever of which we now treat. But if, through a diſregard to regimen, or from being expoſed to contagion, the ſymptoms of fever ſhould appear, an emetic, given in time, will often avert the impending danger.

CHAP. XVII.

Of the Putrid and Remitting Marſh Fever of Bengal.

THIS fever, though in many inſtances analogous to that which we have laſt deſcribed, yet being mentioned as peculiar to a particular part of the Eaſt Indies, requires diſtinct and minute attention; and the following account of it is principally taken from obſervations made during the epidemic prevalency of this diſorder at Bengal, in the years 1762 and 1768.

The ſymptoms and progreſs of the diſorder are as follows; it generally comes on ſuddenly, and approaches with a ſenſe of debility, and a very great depreſſion of ſpirits. Theſe ſymptoms are attended with a greater or leſs degree of chillineſs, a giddineſs, a nauſea, acute pains in the head and loins, and irreſiſtible trembling of the hands: the countenance is pale, the ſkin commonly dry and rough, the eyes dull and heavy, the pulſe quick but ſmall, the breathing generally difficult, and interrupted with violent hiccups.

As the paroxiſm increaſes, the chillineſs now and then gives way to irregular heats, which ſoon become intenſe and continued; the nauſea likewiſe increaſes, and in ſome inſtances a vomiting comes on, by which a great deal of bile is thrown up, and ſometimes bile is alſo diſcharged by ſtool; the ſkin grows red, the eyes ſwell, and in ſome caſes appear exceedingly inflamed; the pulſe becomes more full, and the breathing more difficult, attended with great reſtleſſneſs and extreme thirſt, notwithſtanding which, the nauſea is ſo great that the patient cannot ſwallow any kind of liquids; the tongue becomes foul, and pains of the head and loins grow more violent: a delirium then follows; a ſlight moiſture appears on the face, and from thence ſpreads to the other parts, whilſt the violence of the other ſymptoms abates, and foretels the approach of a remiſſion, which is compleated by profuſe ſweats.

On the remiſſion of the fever, the pulſe returns almoſt to it's natural ſtate; but the pains in the head and loins ſtill continue, though ſomewhat leſs violent: the nauſea and want of appetite alſo in general remain.

When the diſeaſe gains ſtrength, the remiſſion is hardly perceivable, and is almoſt immediately followed by another paroxiſm; which does not, indeed, begin with ſo great a ſhivering, but is attended with a greater pain in the head, the extremeſt anxiety, a heartburn, ſickneſs, vomiting, and bilious ſtools: what the patient vomits and voids by ſtool, is moſt commonly a whitiſh matter, reſembling chalk and water, or the curdled milk which is thrown up by ſucking children, when the curd is much broke down.

An intenſe heat, intolerable thirſt, and increaſed delirium, now come on; the tongue becomes fouler, the teeth and inſide of the lips are covered with a black cruſt; the breath grows ſcalding and fœtid: and at this ſtage another remiſſion enſues, attended with a ſweat; but this remiſſion is neither diſtinguiſhable, nor of ſo long continuance as the firſt.

This ſecond remiſſion is ſucceeded by a paroxiſm, in which the ſymptoms become ſtill more aggravated than in the former; the matter which the patient diſcharges by vomiting and purging is more fœtid; the black cruſt not only remains on the mouth, teeth, and inſide of the lips, but extends to the tongue, which becomes ſo dry and ſtiff, that the patient's voice can ſcarce be heard, and the delirium, with the reſtleſsneſs and anxiety, are increaſed violently during the paroxiſm: nor do theſe ſymptoms abate till the fever again remits, and the patient begins to ſweat.

When the fever becomes ſo violent during the third fit, as to end in death, which is moſt commonly the caſe, ſome of the ſick have a lethargic ſleepineſs; in others, the delirium grows more violent: the diſcharges now become more fœtid, and of a cadaverous ſmell; the ſtools paſs away involuntarily; the urine, which at the beginning of the diſeaſe is pale, becomes gradually of a deeper colour, but without dropping any ſediment; the pulſe is ſo quick, ſmall, and irregular, that it is ſcarce to be counted, or even perceived; a cold, clammy ſweat, ſpreads over the whole body, eſpecially the head and neck; the face becomes diſtorted and convulſed; the patient picks the bedcloaths, and is diſturbed by ſtartings and twitchings of his limbs; he lies entirely on his back, and inſenſibly ſlides down to the foot of the bed; the extremities grow cold and livid; and he is then ſeized with ſtrong convulſions, which cloſe the melancholy ſcene.

Spots ſeldom appear in this diſorder; and the prickly heat on the ſkin, which was one of the preceding ſymptoms, vaniſhes on the firſt appearance of a fever.

Such is the general appearance of the ſymptoms; but they vary in different ſubjects, and at different ſeaſons of the ſame year. For example, the pulſe of ſome of the patients is quick in the beginning of the diſorder, and in others it varies with the other ſymptoms; the ſkin of moſt patients is dry in the beginning of the fit, but in ſome it is moiſt, and covered with ſweat, from the very firſt attack of the diſeaſe.

During the month of September, when the diſorder generally rages moſt, the remiſſions are very imperfect and obſcure; but on the return of winter, and the healthy ſeaſon, they become more regular, and the diſeaſe frequently takes the appearance of an intermitting fever, to ſuch a degree, as at length not to be diſtinguiſhed from it: in ſome, the remiſſions can ſcarce be perceived, and the fever continues for a fortnight, without any material change for the better or the worſe; and at this time numbers are ſeized with it. When the diſorder continues for any time without a change, it generally ends in death; but when the weather grows better, it ſometimes in the ſpace of a few days, from a common fever, becomes an intermitting one, and the patient recovers; unleſs his liver, which is ſometimes the caſe, happens to be affected. The cure of the inflammation of the liver proves for the moſt part uncertain and tedious, as it is generally followed by a waſting diarrhœa, which ſpeedily puts an end to the patient's life.

Every ſucceeding paroxiſm is remarked to be more dangerous than the preceding; the third, as before obſerved, generally proves fatal; ſome die during the fit: when this happens, the fever, in the language of the country, is called a *puca fever*, which ſignifies a *ſtrong fever*.

The European ſeamen are very ſubject to this fever, when they happen to arrive at Bengal in autumn; the nature of their food prediſpoſes them to it, as well as their confinement on ſhip-board, the very great heats they are expoſed to during the paſſage, and their frequently lying for hours together, expoſed to the night colds: of theſe prediſpoſing cauſes, it may be right to take ſome notice ſeparately.

As to the diet, moſt of the meat uſed by the crews of theſe ſhips is ſalted, and very often in a putrid ſtate, and they are obliged to eat it without a morſel of freſh vegetables, and with only biſcuits, peaſe, and a ſmall addition in ſome inſtances of oatmeal; the quantity of wine or ſpirituous liquors allowed them, is infinitely too ſmall to ſubdue the putreſcent diſpoſition of the animal food, and conſequently their fluids become from day to day more and more putrid, and of courſe, the more apt to breed and contract this diſorder.

This diſpoſition to putridity is likewiſe augmented, by their being ſtowed very cloſe together for a conſiderable length of time in a foul air; eſpecially when the weather happens to be ſo ſtormy, and the ſeas ſo high, that the hatches and port-holes are obliged to be kept ſhut.

And though the heats which they endure in the paſſage to India, are by no means ſo intenſe as thoſe which they experience on their arrival in that country, yet they are more than an European conſtitution can well bear. The general heat at ſea relaxes them, and promotes a corruption of their humours, and particularly when it concurs with the above cauſes: it likewiſe creates a languor and indolence, which alone are ſufficient to increaſe the propenſity to putrefaction.

Theſe cauſes are alſo apt to be conſiderably aggravated by the men's being often expoſed, when they are on duty, for hours together, to a rainy, damp, and cold air; a circumſtance which frequently happens to them when they are working their ſhips up the river in the night: and by this expoſure, the perſpiration is checked, and the paſſage of the uſeleſs or unneceſſary fluids, which uſed to be diſcharged by the ſkin, being obſtructed, and thoſe fluids being retained in the body, contribute exceedingly to the prediſpoſition towards this diſeaſe.

Amongſt the more remote cauſes of this diſeaſe, the effluvia of marſhes replete with putrid animal ſubſtances, are reckoned the moſt powerful; though it does not appear from what kind of putrid animal ſubſtances theſe effluvia derive their virulence: for that every kind of putrefaction has not ſuch an effect is apparent, as neither practical anatomiſts, nor thoſe who by their trades are expoſed to the putrid effluvia of animals, ſuch as tanners or butchers, who generally keep their ſhops and ſtalls very dirty, are not more ſubject than others to putrid diſeaſes; nor are the ſhip-ſtewards and others whoſe buſineſs it is to deliver out their proviſions to the ſhip's crews, and who are neceſſarily confined during great part of every day amongſt the putrid and rancid effluvia of ſtore-rooms, or places wherein theſe proviſions are kept, more liable to putrid fevers than the common ſeamen.

But however this may be, many practical medical writers concur in opinion, that ſome particular putrid fermentations produce noxious vapours, which, united with thoſe which exhale from the marſhes, render them more pernicious. To this cauſe, therefore, we may ſafely attribute the ſudden and violent complaints with which thoſe have been ſeized, whoſe buſineſs it has been to bury the dead; and the reaſon why the inundations of the Nile and Ganges are followed by a healthy ſeaſon, is, that by theſe great bodies of water the putrid animal and vegetable ſubſtances diſperſed over the adjacent countries are ſwept off into the ſea: and, upon the whole, it plainly appears, that putrid animal and vegetable ſubſtances are very apt to render the effluvia of fenny places more pernicious than they would otherwiſe be.

But theſe noxious vapours, ariſing from fens, extend but a little way; and it has been often known, that ſhips crews, at a very ſmall diſtance from the ſhore, remain quite free from this diſorder, whilſt it is epidemic on the land, and rages with unabated fury. And though theſe contagious particles, ariſing from marſhy ſituations, may firſt bring on the diſeaſe, yet it is by infection that it ſpreads and becomes more highly epidemic. And the crews of Indiamen have frequently continued free from the diſorder for weeks together, when they had no communication with the other ſhips; but as ſoon as the diſeaſe has been brought on board, many have been ſeized with it within a few days, in ſuch a manner as to leave us no room to entertain the leaſt doubt concerning the peſtilential nature of it.

And in the ſame way the diſorder always proves frequent amongſt the officers of the ſhips, and thoſe in garriſons, when they are obliged, by their duty, to be much among their men: for, if the diſorder was not contagious, theſe gentlemen might be expected to eſcape it, from the great care they generally take of themſelves, and the means they have in their power to avoid being expoſed to what are with ſo much reaſon apprehended to be the prediſpoſing, or exciting cauſes of this diſorder. It has been obſerved, that without ſuffering by it, perſons may accuſtom themſelves to take poiſon in ſuch large quantities as would occaſion inſtant death to thoſe who are unuſed to it; and the caſe is preciſely the ſame with thoſe who conſtantly reſide in countries replete with fenny effluvia, who thereby become ſo much leſs obnoxious to be affected by them; and this, too, is the reaſon that troops newly arrived from Europe ſooner fall ſick, than thoſe who have been for ſome time in garriſon in the Eaſt Indies.

Many perſons have been ſeized by being expoſed to the violent heat of the ſun; and this may be conſidered as a very powerful exciting cauſe of this fever.

And in theſe hot fenny countries, ſudden cold may be reckoned one of the ſtrongeſt exciting cauſes of this diſorder, after the marſhy particles of infection; and ſome are of opinion, that cold alone, if the body is ſufficiently prediſpoſed, is ſufficient to generate a diſorder perfectly like that which is produced by the marſhy effluvia; perhaps the cold acts by bringing on a debility, and checking the perſpiration, by which means the putrid matter, which would otherwiſe be diſcharged by the ſkin, is retained in the body, and produces the fever. But in our enumeration of the occaſional and prediſpoſing cauſes of this fever, we muſt not omit to mention ſleep; for, during this repoſe, the whole frame is relaxed, and becomes more eaſy to be affected by noxious particles, than when men are awake and in action: and from this ſingle circumſtance of ſleeping on ſhore in marſhy places, ſhips frequently loſe great numbers of their hands. And as this occaſional cauſe is ſo very certain, thoſe captains are inexcuſably negligent, who ſuffer any of their crews to ſleep aſhore without the moſt preſſing neceſſity. And on this account, the ſick who are ſuffered to go on ſhore by day for exerciſe, and to procure neceſſaries, ſhould be brought on board ſhip every night; for being debilitated by their diſeaſes, they become much more ſuſceptible of injury, and liable to dangerous relapſes, from ſleeping among noxious night-damps.

Thoſe paſſions and impreſſions of the mind which enervate the body, ſuch as grief, anxiety, fear, and terror, are alſo to be reckoned amongſt the exciting cauſes of this diſorder; for they all tend to check perſpiration, and occaſion weakneſs.

Exceſſes in eating or drinking, are alſo to be conſidered as among the exciting cauſes of this diſeaſe; and it is well known, that when it has been epidemic at Bengal, great numbers have brought it upon themſelves by eating too freely of ſtall-fed beef, whilſt the diſorder continued to rage.

Relapſes are alſo ſaid to be frequently occaſioned by the influences of the ſun and moon, which may therefore be looked on as exciting cauſes of this diſeaſe: and it is remarkable, that a patient who has been recovered for eight or ten days, will be in the greateſt danger of a relapſe about the time of the riſing of the ſprings; that is, two or three days before the full and change of the moon. There are ſo many inſtances of this, and it is ſo well known at Bengal, that it is abſolutely neceſſary to mention it.

Some inſtances have occurred, where the patient had only ſingle paroxiſms about the time of the moon's change, which may be eaſily prevented by the adminiſtering the bark a few days before the time of it's expected return, and continuing it till that time is elapſed; and in ſome caſes, where it could be done with ſafety, the fit has been permitted to come on, even four times every full and new moon, in order to aſcertain the circumſtances of the return of the fits at thoſe times, before the bark has been given to prevent it.

When a great weakneſs, followed by ſhiverings, pains in the head and loins, a weak and quick pulſe, bilious vomiting and ſtools, and a hot fit, going off with a plentiful ſweat, happen to ſeize perſons in fenny countries, whilſt the weather is very ſultry, or immediately after the ſummer heats, at the commencement of the autumnal ſeaſon, it is certain that the diſorder is a marſh fever.

And with regard to the ſpecies of this fever, it is evident, from the remiſſions which almoſt always occur, and from it's aſſuming in moſt caſes the appearance of a regular intermitting fever, that it is to be placed in that claſs; or, if there is any difference, it is to be claſſed with thoſe which practical writers have called remitting fevers. But there is no neceſſity for diſtinguiſhing between theſe and intermitting fevers; and they are very different from ſuch as are accompanied with an inflammatory diſpoſition, where remiſſions are ſcarce perceivable, and therefore are clearly and unqueſtionable to be conſidered as continued fevers.

vers. And if theſe marſh fevers are to be claſſed with ſome particular kind of the intermitting fevers, that of the tertian ague, or fevers, may be the moſt proper, as they generally appear under that form; when they remit or return at ſhorter intervals, they reſemble, in all reſpects, the double tertian fevers, or ſuch other fevers as evidently appear to be of the ſame nature.

The marſh fever may be eaſily diſtinguiſhed from thoſe of the malignant and peſtilential kind; for when it is generated by fenny effluvia, it is uſually accompanied with bilious vomitings and ſtools, and alſo with remiſſions and intermiſſions, none of which are the ſymptoms of thoſe fevers.

In the cure of this diſeaſe, it will be neceſſary to allay the violence of the fever, to evacuate the putrid humours, and to check and counteract the tendency of the body to putrefaction, to ſupport the ſtrength of the patient during the paroxiſm, and, during the remiſſions, to loſe no time in uſing proper means to prevent the return of the fit.

To allay the violence of the feveriſh ſymptoms, every thing that can contribute to increaſe them ought to be carefully avoided or removed; ſuch as great heat, too ſtrong a light falling on the eyes, great noiſe, and violent motion.

When, during the continuance of the paroxiſm, the head and loins are affected with violent pains, when the pulſe is full and hard, and the heat intenſe, bleeding may be uſed, but with the utmoſt caution: for though this operation is well known to be of the greateſt uſe in cold countries, and has been found of ſome ſervice even in warm climates, yet the ſucceſs of this remedy is ſo far from being certain, that the lives of patients have been frequently brought into much danger by it; and ingenious phyſicians are of opinion, that where bleeding is found to be at all neceſſary, it ſhould be performed during the hot fit, and not during the remiſſions between the paroxiſms.

As this fever is produced by an acrid bile, collected in the ſtomach, if the patient has any inclination to vomit, it ſhould be promoted by draughts of warm water, or tea of emollient herbs.

The acrid bile, in the patient's ſtomach and inteſtines, ſhould alſo be diluted, by cooling acidulated liquors; which will contribute to abate the thirſt, leſſen the heat of the body, and of courſe prevent the fever from getting too high: added to which, they alſo ſerve to correct the putrid humours. And thoſe liquids are beſt which are made with ſome farinacious ſubſtance, ſuch as oatmeal, rice, or the like, which moſt eaſily unite with the animal fluids.

Theſe acid liquids, and the juices of the acid and ſubacid fruits, will prove highly ſerviceable, and are equally grateful to the palate, anſwering the purpoſes of food and medicine.

Chryſtals of tartar are alſo recommended in this diſeaſe, and may be either mixed with the patient's common drink, or given with manna, in a decoction of tamarinds, in which form it proves an excellent antiputreſcent purge, carrying off the putrid bile by ſtool; and though it's virtues as an antiputreſcent, may not equal thoſe of lime juice, or the foſſil acids, yet as it is eaſily got and adminiſtered, when the others are not to be had, it is adviſeable for all who are to have the care of ſhips crews, or garriſons in the warm climates, to provide themſelves with a ſufficient quantity of it.

The neutral ſalts, prepared with the juice of lemon, may likewiſe be given during the hot fit; they ſerve to leſſen the nauſea and ſickneſs, to render the paroxiſms more regular, and the remiſſions of longer duration; and they are moſt grateful, as well as efficacious, when they are adminiſtered in a ſtate of fermentation: for this purpoſe, the ordinary ſaline draughts are frequently preſcribed in this work, or the following.

Take of ſalt of wormwood, half an ounce—of chryſtals, or cream of tartar, one ounce and half—of white ſugar, two drams. Mix and reduce the whole to a fine powder; and when a ſaline draught is required, put a dram of this powder into a tea-cupful of water, and give it while the effervescence continues.

It is neceſſary that the putrid humours ſhould be evacuated during the firſt remiſſion; but whether this is to be done by purging or vomiting, muſt be determined by the attending circumſtances. If there are no ſigns of inflammation, vomiting may be proper; and, in that caſe, five or ſix grains of ipecacuanha, with from one to two of emetic tartar, may be given; though ſome adviſe much ſmaller doſes of theſe medicines, to be repeated at intervals of two or three hours, without allowing any drink in the mean time, that the medicines may pervade the inteſtines together, and diſcharge the bile collected in them by ſtool and vomit at once.

Nor is the tartar emetic uſeful only to carry off the putrid humours, it alſo poſſeſſes ſome kind of febrifuge virtues; ſo that if ſmall doſes of it are continued till it excites a nauſea, it not only renders the ſymptoms more mild, but frequently removes the diſorder.

But if any ſymptoms of inflammation ſhould appear in the bowels, or other internal parts, which ſometimes happens when the diſorder has been of long continuance, emetics are injurious, and the neceſſary evacuation of the bile muſt be performed by purgatives only, which always contribute to the cure of this diſeaſe.

Yet acrid and ſtrong purges are poiſon; and mild antiputreſcent ones only ſhould be uſed, ſuch as chryſtals of tartar, and Glauber's ſalts, with pulp, or decoction of tamarinds, manna, and the like.

A fulneſs of the veſſels, as if the humours were ready to burſt them, indicates a neceſſity for purging, which is alſo required when there is a diſagreeable bitter taſte in the mouth, putrid and fœtid eructations, coſtiveneſs, a tenſeneſs of the belly, rumblings of the guts, and gripings; and purges may be given at any time during the remiſſions, unleſs the patient happens to labour under any chillineſs or ſhivering, when they muſt be omitted.

Infuſion or decoction of tamarinds, with chryſtals or cream of tartar, may be the patient's common drink, or at leaſt a conſiderable part of it; and the addition of manna will at any time convert it to a purge, without rendering it nauſeous.

It is abſolutely neceſſary to ſupport the patient's ſtrength, and in this diſorder proper food is almoſt of as much importance as medicine. Inſtances have occurred where ſeveral ſhips have lain together in the ſame port in India, that whilſt the mortality hath been terrible on board ſome of them, others have eſcaped with the loſs of very few men; and this difference hath ariſen entirely from the conduct of the ſeveral commanders. Some have humanely taken great care to ſupply all their companies with neceſſaries ſuited to the climate and ſituation, have attended to the wants of the ſick, allotted to them the moſt airy and wholeſome parts of their ſhips, have divided among them the freſh meats which came to their own tables, and have even given up their houſes on ſhore for the uſe of the convaleſcents: nor hath ſuch benevolence been unrewarded; the greater part of their crews have remained healthy, thoſe who were attacked by the diſeaſe, have recovered, and they have been enabled to load their ſhips, and prepare for their return to Europe; whilſt thoſe who have been leſs attentive to theſe offices of humanity, have loſt their paſſages to England for want of hands to navigate their veſſels.

The proper diet for the ſick, is panada, ſago, boiled rice, or barley, with currants, raiſins, or prunes, and with the addition of a little Port wine or claret and ſugar: during the paroxiſms, a thin rice gruel acidulated with the juice of fruits and ſweetened with ſugar, conſtitutes a pleaſant and wholeſome drink; and, during the remiſſions, a little wine may be added, to ſupport them and recruit their ſtrength againſt the next fit.

The linen of the ſick ſhould be frequently changed, and the bedding aired at every convenient opportunity; the foul linen, excrements, and all other filth, ſhould be removed as ſoon as poſſible; air ſhould be frequently admitted into the places where the ſick are lodged, whether they are on board ſhip or on ſhore; and theſe ſhould be frequently ſprinkled with vinegar, and the hot fumes of it diſperſed through the apartments: theſe are matters on which ſo much depends, that the care of the phyſician and nurſe ſeem to be equally important.

Bliſters are by no means admiſſible, till the fever has been of long continuance, or the pulſe and ſpirits of the patient begin to fail; learned and ingenious phyſicians have pointed out the great danger which attends the premature uſe of them.

But to check this diſorder effectually, and reſtore the patient to health, the bark is the moſt efficacious remedy that has ever yet been diſcovered; nor can this medicine be adminiſtered too early to ſecure the patient from the danger which attends him in every paroxiſm, and to remove thoſe internal obſtructions, which, though they have been miſtakenly attributed to the uſe of the bark, are actually the effects of the diſeaſe; during the ſecond remiſſion, after the firſt paſſages have been cleared, this medicine may be adminiſtered with ſafety, nor is it prudent to delay giving it longer.

Yet, as we have before obſerved, the neceſſary evacuations, and in particular that of purging, muſt precede the uſe of the bark; for, if ever that medicine fails to relieve in this diſeaſe, the want of ſucceſs is owing to the coming on of a diarrhœa or vomiting during the remiſſion of the fever, and before a ſufficient quantity of bark can be taken to prevent it's return; but ſuch conſequences may frequently be avoided, by adding to each doſe of the medicine, from five drops to ten of liquid laudanum, which will aſſiſt the retention of the bark on the ſtomach, and check any propenſity it may have to run off by ſtool.

The ordinary way of adminiſtering the Peruvian bark in this diſeaſe, is in doſes of a dram of the powder, repeated as often during the remiſſions as the ſtomach of the patient will bear them, in a wine-glaſs of water; though ſome have recommended ſmall-beer well hopped as a better vehicle, as it more effectually deprives this medicine of it's diſagreeable taſte: and the firſt doſe ſhould be adminiſtered as ſoon as the fever abates, and the pulſe returns to it's natural ſtate; both which generally take place before the ſweat ceaſes.

An ounce of bark, adminiſtered in this manner at intervals, will in general be ſufficient to give a check to the fever; though it may ſometimes require an ounce and half, and this quantity ſeldom fails: and after the diſeaſe is in a great meaſure removed, the ſame medicine ſhould be continued in ſmall doſes daily, till the patient has regained his ſtrength; and afterwards larger quantities may be given, and in particular at the approach of the rains, or the overflow of the rivers, at which ſeaſons the influence of the ſun and moon are apt to occaſion relapſes.

In cold climates, the haſty preſcription of the bark is ſo far from being of uſe to check fevers, that it very often brings on extreme danger; and this may be attributed to the inflammatory diſpoſition which accompanies moſt fevers in theſe countries: but in warmer climates, where the general tendency is to putridity and not to inflammation,

tion, the bark cannot be offered too ſoon; nay, when putrid fevers have prevailed, it has been found abſolutely neceſſary to attempt ſtopping the mortality, by adminiſtering the bark during the paroxiſm, an expedient which hath been attended with great ſucceſs.

And, as a preparative for this excellent medicine, ſome experienced phyſicians have recommended from twenty to thirty drops of liquid laudanum, to be taken about an hour after the commencement of the hot fit; which has been found to afford immediate relief, ſhortening the fit, allaying the head-ache, bringing on a profuſe ſweat, by which the heat of the fever is abated, and frequently producing a ſweet and refreſhing ſleep, from which the patient hath awaked in a great meaſure free from his complaints; and the paroxiſm being thus mitigated, is much leſs dangerous and injurious.

It may be neceſſary to obſerve, that the food of thoſe who recover from this fever, ſhould be peculiarly attended to, whilſt they remain in a convaleſcent ſtate; in particular, great care ſhould be taken not to indulge them in an early uſe of animal food, which is of all other acts of imprudence moſt likely to occaſion a relapſe.

CHAP. XVIII.

Of the Rheumatiſm of the Eaſt Indies.

THIS diſeaſe is by no means frequent in hot climates; yet it ſometimes attacks common ſeamen, from their getting wet, or ſleeping upon deck in the night dews: it is ſometimes alſo the conſequence of the remitting fever, or dyſentery. In the firſt caſe, it is generally acute, or accompanied with a degree of fever; but in the laſt it is always chronic.

In the *acute rheumatiſm*, if the ſymptoms of inflammation run high, bleeding is neceſſary. The patient ought to be confined to a cool regimen, and a free perſpiration ſhould be kept up by diluting liquors and ſmall doſes of emetic tartar, as recommended in the remitting fever; if the pains become fixed to the joints, bliſters are of great uſe, and ſeldom fail to remove the complaint; and when the chronic rheumatiſm is the conſequence of long continued fevers, or obſtinate fluxes, the diſeaſe is in almoſt all caſes cured by ſweating the patient with ſmall doſes of ipecacuanha and opium, or by Dover's powder; which, however, ought not to be continued for any length of time, as it reduces the patient's ſtrength too much: but, after a while, this courſe ſhould be omitted for two or three days, and then begun again; taking once or twice a week, eſpecially when coſtive, as much gum guaiacum as will gently move the belly.

When the pains have continued obſtinately fixed, the greateſt advantage hath been in many inſtances experienced from the application of a volatile liniment and warm plaſter; and when by theſe means the pains are removed, the Peruvian bark, and the uſe of the cold bath, will ſeldom fail to compleat the cure, and to confirm the health of the patient.

Some caſes of the *chronic rheumatiſm* occur, where the pains are confined to particular parts of the body, as the ſhoulder, the joints of the knees and arms, which have reſiſted every remedy, till at laſt the diſeaſe has been totally and expeditiouſly removed by rubbing mercurial ointment upon the parts affected, and giving the common mercurial pill at the ſame time: but as a ſalivation generally renders the cure more incompleat, theſe medicines ſhould be laid aſide before they produce this effect.

From the ſucceſs which has attended this practice, it might be conjectured, that this rheumatiſm is frequently joined with venereal pains; but it has been found as effectual in inſtances where there was no reaſon to ſuſpect any taint of the kind.

CHAP. XIX.

Of the Plague.

IT is the opinion of eminent phyſicians and hiſtorians, that this fatal diſorder was originally bred in the hot climates of Egypt or Ethiopia; and, as well as the ſmall-pox, was brought into Europe and Aſia by the communications of war or commerce; (into the former it was moſt probably conveyed by means of the war with the Saracens, commonly called Cruſades, or Holy Wars, at the latter end of the eleventh and the beginning of the twelfth centuries:) and that from theſe times the contagious ſeeds of it have been preſerved in the cloaths and furniture of infected perſons and houſes, and it has burſt out in various countries, at different times, as the ſpreading and exerting it's force has been favoured by a moiſt and warm temperature of the air.

In the earlieſt ages, when this diſeaſe was chiefly confined to the ſouthern or ſouth-eaſt quarters of the world, it was conſidered as a ſcourge in the hands of Divine Juſtice, to puniſh the wickedneſs of mankind; and, inſtead of having recourſe to precautions for the prevention, and medicine for the removal of it, the immediate viſitation of Heaven, was only to be relieved by the efficacy of prayers, luſtrations, and ſacrifices.

But, though this opinion is juſtified by the aſſurances of Holy Writ, yet ſpeculations of this kind ſhould by no means be encouraged, as they tend to obſtruct enquiries into natural cauſes, and promote a ſupine ſubmiſſion to evils, for the averting and removing which the wiſe and benevolent Author of Nature has in almoſt all caſes provided remedies.

And, indeed, when the narrow ideas of particular vengeance, vaniſhed before more liberal and expanded notions of religion, and when the knowledge of nature became a neceſſary qualification for the practice and profeſſion of phyſic, even the heathens themſelves oppoſed the doctrine that ſome particular diſeaſes were divine, or ſent immediately from the gods; and urged, that no one diſeaſe was more properly ſent from the gods than others, that all came from them, and all owned their proper natural cauſes; that the heat and cold, and the winds, were all divine, from the changes of which, and their influence on the human body, moſt diſorders might be deduced; and that it was in theſe natural cauſes phyſicians ought to ſeek for the origins of the various maladies which fell under their obſervations.

But before we proceed to enquire into

the cauſes of this dreaded diſeaſe, it may be right to mention an opinion which once prevailed, that the degree of violence with which it rages, conſtitutes the only difference between the plague and other fevers; an opinion which requires no other refutation, than a compariſon of it's ſymptoms with thoſe of the ſmall-pox and meaſles, which have been long acknowledged to be diſtempers diſtinct in kind from all others, and which may each of them be alſo ſaid to be plagues of a particular ſpecies.

The ſmall-pox diſcharges itſelf by eruptions or puſtules, raiſed on the ſkin; and the noxious humour of the plague is either brought to the ſurface by tumours, or buboes in the glands, or by carbuncles in different parts of the body; and ſuch ſpecific marks of this diſtemper are theſe eruptions, that it is never unaccompanied with ſome one or other of them, unleſs the progreſs of the diſeaſe is ſo rapid, or the patient is ſo exhauſted by previous indiſpoſition or weakneſs, that he ſinks before there has been time for the diſcharge to be made in this way, and the matter which ſhould have been expelled by theſe external iſſues falls upon the internals and produces mortifications: and this caſe happens alſo frequently in the ſmall-pox, in tender or debilitated conſtitutions, where it proves fatal before the eruption can take place, either by a diarrhœa an hæmorrhage, or ſome ſuch effect, or the morbid diſpoſitions prevailing in the blood and juices.

When this diſeaſe raged with horrid malignity at Marſeilles, the phyſicians of that place diſtinguiſhed the ſick into five different claſſes, according to the degrees or ſtages of the diſtemper; every one of which, except the firſt, was marked by tumours, buboes, or carbuncles, and thoſe of the firſt claſs were ſeized with ſuch violent ſymptoms (yet correſponding with thoſe of others, in whom they were leſs aggravated) that they died in a few hours, or at fartheſt in a day or two, of the faintneſs, oppreſſion and anxiety, into which they were thrown by the firſt ſhock of the diſeaſe; unqueſtionably, of mortifications in the inteſtines, as was apparent by the diſſection of ſeveral of them: and the ſame event is not only common in the ſmall-pox, as we have before obſerved, but even in the meaſles; for in both theſe diſorders, the patient often dies of the violence of the attack, before any eruption appears on the ſkin.

And this alſo ſhews the difference between the true plague and thoſe fevers of extraordinary malignity, which are the uſual fore-runners of it, and are the natural conſequence of that ill ſtate of air which certainly attends all viſitations of the plague. For ſince all thoſe fevers from which people recover without any diſcharge by tumours in the glands, or by carbuncles, want the characteriſtic ſigns which accompany the ſlighteſt caſes of the true plague, it cannot be concluded upon any juſt ground, that they are only a leſs degree of that diſtemper: on the contrary, we have reaſon to be ſatisfied that they are of a very different nature; not ordinarily contagious like the plague, nor have any ſuch neceſſary relation to it, but that ſuch fevers do frequently appear without being followed by a real peſtilence.

On the other hand, every fever is not to be called a plague, which is followed by eruptions reſembling thoſe above-mentioned: for, as every boil or puſtule which breaks out upon the ſkin is not an indication of the ſmall-pox, nor every ſwelling in the groin a venereal bubo; ſo there are carbuncles not peſtilential, and other fevers beſides the plague which have their criſis by tumours and abſceſſes, and that ſometimes even in the parotid or other glands. There is, indeed, uſually ſome difference between theſe ſwellings in the plague, and in other fevers, eſpecially in the time of their coming out; for, in the plague, they diſcover themſelves ſooner than in moſt other caſes. But the principal difference between theſe diſeaſes is, that the plague is infectious, the other not, at leaſt not to any conſiderable degree.

And this leads to another characteriſing ſyſtem of this diſeaſe, by which it is diſtinguiſhed from common fevers; and this is the contagion certainly accompanying it.

Indeed, this ſymptom is ſo evident, that it is at preſent the current opinion of all mankind, and needs no other proof than the hiſtorical accounts of this fatal diſeaſe.

Yet it is true that ſome have not been attacked by the diſeaſe, though conſtantly attending about the ſick: but this is no proof that it is not infectious; for it is as eaſily underſtood how ſome perſons, by a particular advantage of conſtitution, ſhould reſiſt infection, as how they ſhould conſtantly breathe a noxious air without hurt. And an obſervation of a certain medical writer deſerves notice in this place: that part of a family removed into a town free from the plague, was obſerved by him to be taken ill of it ſoon after the part left behind in the diſeaſed town fell ſick; which certainly could not have happened, unleſs a communication between the healthy and the ſick, by letters or otherwiſe, was the occaſion of it. And a circumſtance of the ſame nature is recorded by another writer on the plague: that many of thoſe who left infected places, were ſeized with the plague in the towns to which they had retired, while the old inhabitants of thoſe towns were free from the diſeaſe. And, indeed, all the appearances attending this diſorder are very eaſily explained upon this principle of infection, and are hardly to be accounted for upon any other. And hence we learn the reaſon why, when the plague makes it's firſt appearance in any place, though the number of ſick is exceeding ſmall, yet the diſeaſe uſually operates upon them in the moſt violent manner, and is attended with it's very worſt ſymptoms; but if the diſeaſe was not produced by imported contagion, but from ſome cauſe which had it's original in the diſeaſed place, and conſequently from a cauſe gradually bred, the contrary muſt happen: the diſeaſed would at firſt not only be few in number, but their ſickneſs likewiſe more moderate than afterwards, when the morbific cauſes were raiſed to their greateſt malignity. From the ſame principle, we ſee the reaſon why people have often remained in ſafety in a diſeaſed town, only by ſhutting themſelves up from all communication with ſuch as might be ſuſpected of giving them the diſeaſe; and when the plague was laſt in England, while it was in the town of Cambridge, the colleges remained entirely free by uſing this precaution. In the plague at Rome, in the years 1656 and 1657, the monaſteries and nunneries for the moſt part defended themſelves by the ſame means: whereas, at Naples, where the plague was a little before, theſe religious houſes, from their neglect in this reſpect, did not eſcape ſo well. Nay, the infection entered none of the priſons at Rome, though the naſtineſs of thoſe places expoſes them ſo much to every kind of peſtilential diſeaſe: and to add one inſtance more; there is no other means of explaining how the laſt plague in the city of London, which broke out in the pariſh of St. Giles, in the Fields, towards the latter end of the year 1664, ſhould lie aſleep from Chriſtmas to the middle of February, and then break out again in the ſame pariſh; and after another long reſt till April, ſhew itſelf again exactly in the ſame place.

Whoever examines thoſe hiſtories of plagues, in all times, which have deſcribed them with any tolerable exactneſs, will find very few that do not agree in theſe eſſential marks, by which the plague may be diſtinguiſhed from other fevers, notwithſtanding an inſtance or two may be found to the contrary; of which, perhaps, the hiſtory of our own country furniſhes the moſt remarkable; but examples of this kind are ſo very rare, that the plague muſt be admitted to be uſually one and the ſame diſtemper.

Nor will it be difficult to prove, that the plague has always the ſame original, and is brought from Africa; a quarter of the world to which we are indebted for two other infectious diſtempers, the ſmall-pox and meaſles; in all countries, indeed, very mortal epidemic diſeaſes are frequently bred in gaols, ſieges, and camps, which authors have often in a large ſenſe called peſtilential; but the true plague, which is attended with the diſtinguiſhing ſymptoms before deſcribed, and which ſpreads from country to country, is unqueſtionably an African fever, bred in Æthiopia or Egypt, and the infection of it carried by trade into the other parts of the world.

In all ancient hiſtory, there is no account of any plague ſo dreadful as that which broke out in Conſtantinople in the time of the Emperor Juſtinian, in the year 543: this is ſaid to have ſpread it's infection over all the earth, and to have laſted fifty-two years; the hiſtory of it is well deſcribed by two hiſtorians of credit, and they both obſerve, that the diſtemper had it's birth in Æthiopia or Egypt.

This opinion is alſo agreeable to the modern relations of travellers and merchants from Turky; who, without exception, aſſert that the frequent plagues which depopulate that country, are brought thither from the coaſt of Africa; ſo that at Smyrna, and other ports of that coaſt, they often know the very ſhip which brings it; and ſince the European trade with Turky has been pretty conſtant, the plagues in theſe weſtern parts of Europe have evidently been brought from thence.

The laſt plague in France came indiſputably from Turky; that which broke out at Dantzick, in the year 1709, and ſpread from thence to Hamburgh, Copenhagen, and other cities in the north, made it's way thither from Conſtantinople, through Poland; and the laſt plague in this city, had the ſame original, being brought immediately to us from Holland, but communicated to that country by cotton imported from Turky.

The greateſt mortality that has happened in later ages, was about the middle of the fourteenth century, when the plague ſeized country after country for five years together. In the year 1346, it raged in Egypt, Turky, Greece, Syria, and the Eaſt-Indies; in 1347, ſome ſhips from the Levant carried it into Sicily, Piſar, Genoa, and other parts of Italy; in 1348, it got into Savoy, Provence, Dauphiny, Catalonia, and Caſtile; in 1349, it ſeized England, Scotland, Ireland, and Flanders; and the next year prevailed in Germany, Hungary, and Denmark: and in all places where it came, it made ſuch heavy deſtruction, that it is ſaid to have diſpeopled the earth of more than half it's inhabitants; and ſince Africa had a ſhare of this plague in the very beginning, it cannot be doubted but it had it's firſt riſe in that country, and not China, as ſome hiſtorians of thoſe times have repreſented, from the report of Genoeſe ſeamen, who came from theſe parts of Aſia, and pretended it was occaſioned there by a ball of fire, which either burſt out of the earth, or fell down from heaven; but this relation is too abſurd to need contradiction.

It is very remarkable, that the ſeveral countries of Europe have always ſuffered more or leſs in this way, according as they have had a greater or leſſer commerce with Africa, or with thoſe parts of the eaſt that have traded thither; an obſervation which may alſo help to ſolve a difficulty concerning the great increaſe of people among the northen nations in ancient times more than at preſent; for in thoſe ages they had no communication at all with Africa, and therefore were not waſted with plagues as they have been ſince.

As the people of Marſeilles, from the firſt foundation of their city, were famous for trade, and made long voyages ſouthwards on the coaſt of Africa; ſo they have in all times been very liable to the plague. A

French author, in a hiſtory of the laſt plague at Marſeilles, enumerates twenty plagues which have happened in that city; notwithſtanding it is by it's ſituation one of the moſt healthy and pleaſant places in France, and the leaſt ſubject to epidemic diſtempers; but if we had no records of this in hiſtory, a cuſtom among them mentioned by writers of antiquity, by the obſervance of which they hoped to clear themſelves from this diſtemper, would be a proof of it. According to theſe accounts, ſome indigent perſon offered himſelf to be maintained at the public expence with delicate food for a whole year; at the end of which he was led about the city dreſſed in conſecrated garments, and decked with herbs, and being loaded with curſes as he went along, that the evils of the citizen might fall upon him, he was at laſt thrown into the ſea.

Having ſhewn that the plague is a diſeaſe communicated by infection, and that it takes it's riſe principally, if not wholly, in Africa; it may not be unintereſting to conſider what there is peculiar to that country, which can reaſonably be ſuppoſed capable of producing it; and to this purpoſe it will be neceſſary to deſcribe ſhortly, the ſtate of Grand Cairo in Egypt, and of Æthiopia, the two great ſeminaries of the plague, ſo far as it relates to the production of this diſorder; travellers agree that theſe countries are more infected with it than moſt other parts of Africa.

Grand Cairo is crouded with vaſt numbers of inhabitants, who for the moſt part live poorly and naſtily; the ſtreets are narrow and cloſe; it is ſituate in a ſandy plain, at the foot of a mountain, which, by keeping off the winds that would refreſh the air, makes the heats very ſuffocating; through the midſt of it paſſes a great canal, which is overflowed with water at the riſing of the Nile, and after that river is decreaſed, gradually dries up; into this canal the people throw all manner of filth and putrified carcaſes, ſo that the ſtench which ariſes from theſe offenſive bodies, and the mud together, is inſufferably offenſive; and under theſe circumſtances the plague almoſt every year preys upon the inhabitants, and is only ſtopped when the Nile, by overflowing again, waſhes away this load of filth; the cold winds, which ſet in at the ſame time, lending their aſſiſtance by purifying the air.

In Æthiopia, thoſe prodigious ſwarms of locuſts, which at ſome times devouring the fruits of the earth, cauſe an actual famine, unleſs they happen to be carried by the winds clearly off into the ſea, are obſerved to entail a new miſchief upon the country, when they die and rot, by raiſing a peſtilence; the putrefaction being heightened by the exceſſive intemperance of the climate, which is ſo very great in this country, that it is infeſted with violent rains at one ſeaſon of the year, for three or four months together; and it is particularly obſerved of this country, that the plague uſually invades it whenever rains fall during the ſultry heats of July and Auguſt.

And, if we conſider all circumſtances, and compare them together, we ſhall be fully inſtructed in the uſual cauſes of this diſeaſe, which may be juſtly attributed to the putrefaction ſo conſtantly generated in theſe countries; when that is heightened and increaſed by the ill ſtate of air now deſcribed, and eſpecially by the putrefaction of animal ſubſtances.

It is very plain, that animal bodies are capable of being altered into a matter fit to breed this diſeaſe; becauſe this is the caſe of every one who is ſick of it, his humours being corrupted into a ſubſtance, which will infect others: and it is not improbable, that the volatile parts with which animals abound, may in ſome ill ſtates of air in the ſultry heats of Africa, be converted by putrefaction into a ſubſtance of the ſame kind; ſince in theſe colder regions, we ſometimes find they contract a greater degree of acrimony by putrefaction than moſt other ſubſtances, and are more dangerous for men to come within the reach of their action; ſo that animal putrefaction ſometimes produces in theſe northern climates very fatal diſtempers, though they do not ariſe to the malignity of the true plague; for, as has been already obſerved, ſuch fevers are often bred where a large number of people are cloſely confined together in gaols, garriſons, and camps.

And ſo ſenſible were the Egyptians of old how much the putridity of dead animals contributed towards breeding the plague, that they worſhipped the bird ibis, for the ſervice it did in devouring great numbers of ſerpents, which they obſerved were as noxious by their ſtench when they died, as by their bite when alive.

But no kind of putrefaction is ever heightened in theſe European countries to a degree capable of producing the true plague; and there is no doubt but that ſome indiſpoſition of the air is neceſſary in the hotteſt climates, either to cauſe ſo exalted a corruption of animal ſubſtances, or at leaſt to inforce upon men's bodies the action of the effluvia exhaled from them whilſt they putrify; both which effects may well be expected from the ſenſible ill qualities of the air before deſcribed, whenever they continue and exert their force together for any conſiderable length of time.

But whatever be the cauſe of the plague, it is of a nature which, when taken into the body, works ſuch changes in the blood and juices, as to produce this diſeaſe, by ſuddenly giving ſome parts of the humours ſuch corroſive qualities, that they either excite inward inflammations and gangrenes, or puſh out carbuncles and buboes, the matter of which, when ſuppurated, communicates the like diſeaſe to others, in a manner which will be hereafter deſcribed.

It has been neceſſary to trace thus particulary the firſt origin of the plague, to remove as much as poſſible every objection againſt what is intended to be ſaid reſpecting the cauſes by which it is excited and propagated in this country: and this is done by contagion. Thoſe who are unacquainted with the full power of this, and who do not underſtand how ſubtile it is, and how widely the diſtemper may be ſpread by infection, aſcribe the riſe of it wholly to the malignant quality of the air in all places where it happens; and ſome, on the contrary, have imagined that the conſideration of the infectious nature of the diſeaſe muſt neceſſarily exclude all regard to the influence of the air: whereas, in truth, the contagion accompanying the diſeaſe, and the diſpoſition of the air to promote that contagion, ought equally to be conſidered.

The cauſes which ſpread the plague, are reducible to three; diſeaſed perſons, goods tranſported from infected places, and a corrupted ſtate of air.

There are ſeveral diſeaſes which will be communicated from the ſick to others; and this not after the ſame manner in all. The hydrophobia is communicated no other way than by mixing the morbid juices of the diſeaſed animal immediately with the blood of the ſound, by a bite, or ſome ſimilar conveyance; the itch is given by ſimple contact; the lues venerea not without a more intimate connection: but the meaſles, ſmall-pox, and plague, are caught merely by a near approach to the perſon infected; for, in theſe three laſt diſeaſes, reſiding in the ſame houſe, or converſing with the ſick, is ſufficient to obtain the diſtemper.

Now it appears from repeated experiments of giving the plague to dogs, by putting the bile, blood or urine, from infected perſons, into their veins, that the whole maſs of the animal fluids is in this diſeaſe highly corrupted and putrified. It is therefore eaſy to conceive, how the effluvia or fumes from liquors ſo affected may taint the ambient air; particularly at the height of the fever, when the humours are in the greateſt fermentation: as it is obſerved of fermenting liquors, which towards the concluſion of their inteſtine motion

tion throw off a great quantity of their moſt ſubtile and active particles. And this diſcharge will chiefly be made upon thoſe glands of the body, in which the ſecretions are the moſt copious, and the eaſieſt increaſed; ſuch as thoſe of the mouth and ſkin. From theſe, therefore, the air becomes impregnated with peſtiferous atoms; which being taken into the body of a ſound perſon, and acting in nature of a ferment, put the fluids there into the like agitation and diſorder.

Theſe peſtiferous atoms are received into the body two ways: by the breath, and by the ſkin; but chiefly by the breath.

It ſeems certain, that reſpiration always communicates to the blood ſome parts from the air: which is proved from obſerving, that the ſame quantity of air will not ſuffice long for breathing, though it be not deprived of thoſe qualities by which it is fitted to inflate the lungs and agitate the blood, the uſes commonly aſcribed to it. And this is farther confirmed by the relation of a learned and eminent gentleman, who being ſeveral fathoms under water in a diving-engine, and breathing an air much more condenſed than the natural, took notice that he breathed ſlower than uſual: from which it appears, that this conveying to the blood ſome ſubtile parts from the air, is the chief uſe of reſpiration; ſince, when a greater quantity of air than uſual was taken in at a time, and conſequently more of theſe ſubtile parts received at once by the blood, a leſs frequent reſpiration ſufficed.

As to the ſkin, ſince there is a continual diſcharge made through it's innumerable pores, of the matter of inſenſible perſpiration and ſweat; the ſame paſſages will undoubtedly admit ſubtile corpuſcles, which may penetrate inward ſimilar to what we obſerve on the outward application of ointments and warm bathings, which have their effects by the fineſt and moſt active parts inſinuating themſelves into the blood.

It has been commonly thought, that the blood only is affected in theſe caſes by the morbific effluvia: but there is another fluid in the body, equally, if not more, ſubject to the infection, eſpecially in the beginning; that is, the liquid of the nerves, uſually called the animal ſpirits. As this is the immediate inſtrument of all motion and ſenſation, and has a great agency in all the glandular ſecretions, and in the circulation of the blood itſelf, any conſiderable alteration therein muſt be attended with dangerous conſequences. It is impoſſible that the whole maſs of blood ſhould be corrupted in ſo ſhort a time as that in which the fatal ſymptoms frequently diſcover themſelves. Thoſe patients of the firſt claſs, mentioned in the beginning of this chapter, particularly the porters who opened the infected bales of goods in the Lazarettos of Marſeilles, died on the firſt appearance of infection, as it were by a ſudden ſtroke; being ſeized with rigors, tremblings, heart-ſickneſs, vomitings, giddineſs and heavineſs of the head, an univerſal languor and inquietude, and a low unequal pulſe, and death ſometimes enſued in a few hours.

Such ſudden effects muſt doubtleſs be owing to the action of ſome corpuſcles of great force, inſinuated into, and changing the properties of, another ſubtile and active fluid in the body: and ſuch, certainly, is the nervous liquor.

Though it is not to be expected we ſhould be able to explain the particular manner by which this effect is brought about, (from the confined limits of all human underſtanding, reſpecting the frame of the univerſe, and the laws of attractions, repulſions and coheſions, among the minuteſt parcels of matter, and the means by which they affect each other, eſpecially within animal bodies, the moſt delicate and complicated of all the known works of nature) yet we may perhaps make a probable conjecture.

It is by no means improbable, that the

animal ſpirits are a thin liquor, ſeparated in the brain, and from thence derived into the nerves, of ſuch a nature that it admits, and has incorporated with it, a great quantity of this elaſtic fluid, which makes it a vital ſubſtance of great energy. And a liquor of this kind muſt be very ſuſceptible of alterations from other active bodies of a different nature from it, if they approach to and are mixed with it: as we ſee ſome chemical ſpirits, on their being put together, fall into a fermentation, and make a compoſition of a quite different kind.

If, therefore, the effluvia or exhalations from a corrupted maſs of humours in a body that has the plague are allowed to be volatile and fiery particles, carrying with them the qualities of thoſe fermenting juices from which they proceed; it will not be hard to conceive how theſe may, when received into the nervous fluid of a ſound perſon, excite in it ſuch inteſtine motions as may make it partake of their own properties, and become more unfit for the purpoſes of the animal œconomy.

This is one reaſon why the plague, when once bred, ſpreads and increaſes; but the ſecond cauſe, that of goods brought from infected places, extends the miſchief much wider. By the firſt, the plague may be ſpread from perſon to perſon, from houſe to houſe, or perhaps from town to town, though not to any great diſtance; but this carries it into the remoteſt regions. Hence the trading parts of Europe derive their principal apprehenſions, and have univerſally provided for their ſecurity by the inſtitution of quarantines.

It has been thought ſo difficult to explain the manner in which goods retain the ſeeds of contagion, that ſome writers have imagined infection to be performed by means of inſects; whoſe eggs being conveyed from place to place, formed the diſeaſe when they came to be hatched. But this is a ſuppoſition grounded on no ſort of obſervation, nor is there the leaſt need to have recourſe to it. If, as has been conjectured, the matter of contagion be an active ſubſtance generated chiefly from animal corruption, it is certainly not hard to conceive how this may be lodged and preſerved in ſoft porous bodies, which are kept cloſely preſſed and confined together.

Every body knows how long perfumes retain their ſcent, if wrapt up in proper coverings: and it is remarkable, that the ſtrongeſt of theſe, like the matter of which we now treat, are chiefly animal juices, ſuch as muſk, civet, and the like; and that the ſubſtances found moſt fit to preſerve them in, are the very ſame with thoſe which are moſt apt to receive and communicate infection, as furrs, feathers, ſilk, hair, wool, cotton, and flax, the greateſt part of which are likewiſe of the animal kind.

Indeed, there is nothing from which we can obtain ſo juſt a notion of infection, or which can more clearly repreſent the manner of it's operation, than odoriferous bodies. Some of theſe moſt aſtoniſhingly revive the animal ſpirits; while others inſtantaneouſly depreſs and ſink them: we may therefore eaſily conceive, that the active particles of peſtiferous bodies may act in a ſimilar manner with thoſe of ſuch ſubſtances as have been mentioned; ſo that contagion is no more than the effect of volatile offenſive matter drawn into the body by the ſenſe of ſmelling.

The third cauſe aſſigned for the ſpreading of contagion, is a corrupted ſtate of air. And although the air be in a proper ſtate, yet a ſick perſon may infect thoſe who are near him: as we find the peſtilence ſometimes continue among the crew of a ſhip, after they have ſailed out of the infectious air in which the diſeaſe was at firſt contracted. A remarkable accident of this nature happened in the plague at Genoa, in 1656; where eleven perſons put to ſea in a felucca, with deſign to withdraw themſelves from the contagion, and retire into

Provence: but one of them falling ſick of the plague ſoon after they had embarked, infected the reſt; and others being taken ill, and dying in their turns, they were every where refuſed admittance, and forced to return from whence they came; ſo that by the time the boat arrived again at Genoa only one ſurvived.

In this caſe, however, the malady does not uſually ſpread far, the contagious particles being ſoon diſperſed and loſt. But when in a corrupt diſpoſition of the air the contagious particles meet with the ſubtile parts generated by ſuch corruption, and unite with them, they become much more active and powerful, as well as of a more durable nature; forming an infectious matter capable of conveying the miſchief to a greater diſtance from the diſeaſed body out of which it was produced.

In general, a hot air is more diſpoſed to ſpread contagion than a cold one; as cannot be doubted by thoſe who conſider how much farther all kinds of effluvia are diffuſed in a warm than in a cold air. And that ſtate of air, when unſeaſonable moiſture and want of winds are added to it's heat, which gives birth to the plague in ſome countries, will no doubt promote it in all: for Hippocrates gives the ſame deſcription of a peſtilential ſtate of air in his country, as that to which the Arabians attribute the riſe of the plague in Africa. Beſides, it is eaſy to ſhew how the air, by the ſenſible ill qualities already noticed, ſhould favour contagious diſeaſes, by rendering the body obnoxious to their effects.

Indeed, other hurtful qualities of the air are more to be regarded than the mere heat: for the plague is ſometimes ſtopped while the heat of the ſeaſon increaſes, on the amendment of the air in other reſpects. At Smyrna, in particular, where the plague is conſtantly carried every year, by ſhips, it always ceaſes about the 24th of June, owing to the dry and clear weather they at that time enjoy, the unwholeſome damps that annoy the country in the ſpring being then wholly diſſipated. The heat of the air is, however, of ſo much conſequence, that if any ſhip brings the infection in the winter months of November, December, January, or February, it never ſpreads; whereas, if it is brought later in the year, as in April or afterwards, it continues till the before-mentioned time.

What has been ſaid of ſome latent diſorders in the air having a ſhare in ſpreading the plague, will likewiſe have place in theſe countries; as the laſt plague in the city of London remarkably proves, the ſeeds of which, on it's firſt entrance, and while it was confined to a houſe or two, preſerved themſelves through a hard froſty winter, and again put forth their malignant quality as ſoon as the warmth of the ſpring gave them ſtrength: but at the latter end of the next winter they were ſuppreſſed ſo as not to appear again, though in the month of December more than half the pariſhes of the city were infected.

A corrupted ſtate of air is no doubt neceſſary to give theſe contagious atoms their full force; for otherwiſe it would be difficult to conceive how the plague, when once it had ſeized any place, ſhould ever ceaſe but with the deſtruction of all the inhabitants: which is, however, readily accounted for, by ſuppoſing an amendment of the qualities of the air, and it's reſtoration to a healthful ſtate, capable of diſſipating and ſuppreſſing the malignity.

On the other hand, it does not appear that the air, however corrupted, is uſually capable of carrying infection to a very great diſtance; for the plague is commonly ſpread from town to town by infected perſons and goods: and there are numberleſs inſtances, where the plague has cauſed a great mortality in ſome towns, while other towns and villages very near them have wholly eſcaped it. And hence it is, that the plague ſometimes ſpreads from place to place very irregularly. An hiſtorian of good authority, mentions a plague in Italy, which one year was at Trent and Verona, and the next got into Venice and Padua; leaving Vicenza, an intermediate place, entirely free from infection, though the next year that alſo felt the like dreadful calamity: a ſufficient proof that the plague was not carried by the air from Verona to Padua and Venice; for the infected air muſt have tainted all in it's paſſage. We have had in France an inſtance of the ſame nature, where the plague was carried at once out of Provence ſeveral leagues into the Gevaudan. Uſually, indeed, the plague, eſpecially when more violent than ordinary, ſpreads from infected places into thoſe which border upon them: but this, no doubt, is ſometimes effected by ſuch little communications as are obliged to be held for the ſake of neceſſaries, the ſubtilty of the venom now and then eluding the greateſt precautions; and at others, by ſuch as withdraw themſelves from infected places into the neighbourhood.

It cannot, it is true, be demonſtrated, that when the plague makes great ravage in any town, the ſick ſhall never be ſo numerous as to load the air with a ſufficient quantity of infectious effluvia, to be conveyed by the winds without diſperſing ſo as to prevent any ill effects, into a neighbouring town or village; eſpecially, as it is by no means unuſual for the air to be ſo charged with theſe noxious atoms, as to prevent any part of the infected town from being at all ſecure; ſo that when the diſtemper is at it's height, all become infected, as well thoſe who keep from the ſick, as thoſe who are near them; but, at the beginning of a plague, to avoid all communication with the diſeaſed, is an effectual defence. However, this is not often the caſe: juſt as the ſmoke, with which the air of the city of London is conſtantly impregnated, eſpecially in winter, is not carried many miles diſtant; though the quantity of it is conſiderably more than the quantity of infectious effluvia that the moſt mortal plague can well be ſuppoſed to generate.

But, ſince the ill qualities of the air in theſe northern countries, are clearly inſufficient to excite the plague, without imported contagion, the error of a common opinion, countenanced by certain authors of great repute, that we are neceſſarily viſited with the plague once in thirty or forty years, is certainly a mere chimera, without foundation either in reaſon or experience, and ought to be univerſally exploded. As the peſtilence is never originally bred with us, but always brought accidentally from foreign countries, it's coming can have no poſſible relation to any certain period of time: and although our three or four laſt plagues have fallen out nearly at ſuch intervals, yet that is much too ſhort a compaſs of years to be any foundation for a general rule; and we have accordingly ſeen that upwards of a century has elapſed without any ſuch calamity.

The air of our climate is, indeed, ſo far from being ever the original of the true plague, that it probably never produces even thoſe milder infectious diſtempers, the ſmall-pox and meaſles: for theſe diſeaſes were not heard of in Europe before the Moors had entered Spain; and they were afterwards propagated and ſpread through all nations, chiefly by means of the wars with the Saracens.

And ſo far are we from any neceſſity of theſe periodical returns of the plague, that, on the contrary, though we have had ſeveral ſtrokes of this kind, yet there are inſtances of bad contagions from abroad being brought over to us, which, when our northern air has not been diſpoſed to receive ſuch impreſſions, have proved leſs malignant here.

The *ſweating ſickneſs*, before hinted at, called *ſudor Anglicus*, and *febris ephemera Britannica*, becauſe it was commonly thought to have taken it's riſe in this country, was moſt probably of a foreign original; and though not the common plague, with glandular tumors and carbuncles, yet a real peſtilence from the ſame cauſe, only altered in it's appearance, and abated in it's violence, by the ſalutary influence of our climate: for it preſerved an agreement with the common plague in many of it's ſymptoms, as exceſſive faintneſs, inquietudes, and inward burnings; theſe ſymptoms being no where obſerved in ſo intenſe a degree as they are deſcribed to have been, except in the true plague; and, what is much more, it was likewiſe a contagious diſeaſe.

The firſt time this was felt here, which was in the year 1485, it began in the army that came from France and landed in Wales with King Henry the Seventh; and is by ſome ſuppoſed to have been brought from the famous ſiege of Rhodes by the Turks, three or four years before.

Beſides, of the ſeveral returns which this diſeaſe has made ſince that time, viz. in the years 1506, 1517, 1528, and 1551; that in the year 1528, may reaſonably be ſuſpected to have owed it's origin to the common peſtilence which at thoſe times raged in Italy, as a celebrated hiſtorian has long ago conjectured; and the others were very probably from a Turkiſh infection: if, at leaſt, ſome of theſe returns were not owing to the remains of former attacks, a ſuitable conſtitution of air returning to put the latent ſeeds in action before they were quite deſtroyed. And it is the more probable that this diſeaſe was owing to imported contagion; becauſe we are aſſured, that this form of the ſickneſs was not peculiar to our iſland, but that it made great deſtruction, with the ſame ſymptoms, in Germany and other countries.

This diſtemper is properly denominated a plague with leſſened force; becauſe, though it's carrying off thouſands for want of right management was a proof of it's malignity; (which, indeed, in one reſpect, exceeded that of the common plague itſelf, for few who were deſtroyed with it ſurvived the ſeizure above a ſingle day) yet it's going off ſafely with profuſe ſweats in twenty-four hours, when due care was taken to promote that evacuation, proved it to be what a learned and judicious hiſtorian calls it, *rather a ſurprize to nature, than obſtinate to remedies*; who aſſigns this reaſon for expreſſing himſelf thus, that if the patient was kept warm with temperate cordials, he commonly recovered. What ſeems yet more remarkable, ſweating, which was the natural criſis of this diſtemper, has been found by great phyſicians the beſt remedy againſt the common plague; and, when timely uſed, that diſtemper may ſometimes be carried off by this means, without any external tumors. And a judicious writer ſays, that in many of his patients, when he had ſubdued the violence of the diſtemper by an artificial ſweat, a natural one would frequently break forth and prove exceedingly refreſhing.

And, as a confirmation of what has been advanced, we had in England, about September 1713, the ſame kind of fever as then raged at Dunkirk, and which, being brought over by our ſoldiers from that place, was thence called the Dunkirk fever; (though probably it had it's origin from the plague, which a few years before broke out at Dantzick, and continued ſome time among the cities of the north:) with us this fever began only with a pain in the head, and went off in large ſweats uſually after a day's confinement; but at Dunkirk it was attended with the additional ſymptoms of vomitting and diarrhœa.

On the whole, it appears very plainly, that the plague is a real poiſon, which being bred in the ſouthern parts of the world, is carried by commerce into other countries, particularly Turky, where it maintains itſelf by a kind of circulation from perſons to goods, which is chiefly owing to the negligence of the people there, who are ſtupidly careleſs about it; that when the conſtitution of the air happens to favour infection, it rages there with great violence; that at that time more particularly diſeaſed perſons ſpread the infection, and from them contagious matter is lodged in goods of a looſe and ſoft texture, which being packed up and carried into other countries, let out, when opened, the impriſoned ſeeds of contagion, and produce the diſeaſe whenever the air is diſpoſed to give them force, but otherwiſe diſſipate without any conſiderable ill effects; and, laſtly, that the air does not uſually diffuſe and ſpread the contagion to any great diſtance, if intercourſe and commerce with the place infected be ſtrictly prevented.

As it is an undoubted ſatisfaction, to know that the plague is not a native of our country, ſo is this conſideration a moſt powerful inducement for us to make uſe of every exertion which may tend to preſerve us from all the horrors of ſo dreadful a calamity.

For this purpoſe, two cautions are particularly neceſſary: the one, to prevent it's being brought into our iſland; the other, ſhould ſuch a calamity happen, to put a ſtop to it's ſpreading among us.

The firſt of theſe is provided for by the eſtabliſhed method of obliging ſhips from infected places to perform quarantine; reſpecting which the following rules ſeem neceſſary to be obſerved.

Contiguous to our ſeveral ports, lazarettos ſhould be built in convenient places, (if poſſible, on little iſlands) for the reception both of perſons and goods arriving from places ſuſpected of infection. Keeping men in quarantine on board the ſhip is by no means ſufficient; nor is it eaſy to diſcover what other advantage can attend ſuch a practice, than merely to know whether any of them die: for infection may be preſerved ſo long in any apparel wherein it is once lodged, that more of it, if ſickneſs continues in the ſhip, may be brought on ſhore at the end than at the beginning of the forty days; unleſs a new quarantine were to commence every time any perſon dies, which would then have no likely concluſion but with the deſtruction of the whole crew.

If there really has been any contagious diſtemper in the ſhip, the ſound men ſhould be waſhed and ſhaved; and, having ſunk their old cloaths in the ſea, and been provided with freſh ones, ſhould ſtay in the lazaretto thirty or forty days: for perſons may themſelves be recovered from a diſeaſe, and yet retain matter of infection about them a conſiderable time; as we frequently find the ſmall-pox taken from thoſe who have ſeveral days before paſſed through the diſtemper.

The ſick ſhould be kept in houſes remote from the ſound, and ſhortly after they recover, ſhould alſo be waſhed and ſhaved, and have freſh cloaths; whatever they wore while ſick being ſunk or buried: and then, being removed to the houſes of the ſound, they ſhould continue there thirty or forty days.

It is particularly neceſſary to deſtroy the cloaths of the ſick, becauſe they harbour the very quinteſſence of contagion. A very ingenious author, in his admirable deſcription of the plague at Florence, in the year 1348, relates, that he ſaw two hogs, who having found in the ſtreets the rags which had been thrown out from ſome poor perſon who had died of the diſeaſe, after tumbling them about, and tearing them with their teeth for ſome time, fell into convulſions, and died in leſs than an hour. And a learned writer acquaints us, that no leſs than twenty-five perſons were ſucceſſively killed by the infection of one furr garment, during a plague at Verona, which happened in his time. And a like inſtance is related, in a work of good authority, of ſeven children who became infected, and died, by playing upon cloaths brought to

Alckmaer in North Holland, from an infected houſe in Zealand.

If there has not been any ſickneſs in the ſhip, there ſeems to be no reaſon why the men ſhould perform quarantine; inſtead of which, they need only be waſhed, and their cloaths aired in the lazaretto, as goods, for a week.

But the greateſt danger is from goods likely to retain infection; ſuch as cotton, hemp, flax, paper, books, ſilks, linen, wool, feathers, hair, and all kinds of ſkins. The lazaretto for theſe ſhould be at a diſtance from that for the men; and, being unpacked in convenient warehouſes, they ſhould be expoſed as much as poſſible to the freſh air, for forty days.

This may perhaps ſeem too long; but as we know not the preciſe time neceſſary to purge the interſtices of ſpongy ſubſtances from infectious matter by freſh air, too much caution cannot be uſed in this particular: and the time propoſed having been long eſtabliſhed by general cuſtom, ought not in the leaſt to be retrenched, unleſs there could be ſome method deviſed for diſcovering with certainty when bodies have ceaſed to emit the noxious fumes. This might poſſibly be diſcovered by putting tender animals near them, particularly birds; becauſe it has been obſerved, in times of the plague, that the infected places have been forſaken by the birds, and thoſe kept in houſes have uſually died. Now, ſhould it be found, that birds let looſe among goods at the beginning of their quarantine, are affected by the contagion therein, it may in ſome meaſure be known when ſuch goods are become clean, by repeating the trial till birds can fly among them without receiving any hurt. But the uſe of this expedient is only to be known from experience. In the mean time, compaſſion to ſuch poor labourers as muſt expoſe their lives to danger in attendance upon this work, would perhaps well juſtify even a leſs probable experiment. And though it cannot be doubted, that there are infections among animals which do not indifferently affect all kinds of them, ſome being confined to a particular ſpecies, (like the diſeaſe of the black cattle a few years ſince, which neither proved infectious to other brutes, nor to men;) yet it has always been obſerved, that the true plague among men has been deſtructive to all living creatures.

A very remarkable ſtory, communicated by a perſon of undoubted credit, and applicable to the preſent purpoſe, well deſerves to be noticed. In the year 1726, an Engliſh ſhip took in goods at Grand Cairo, while the plague raged in that city, and carried them to Alexandria: and, upon opening one of the bales of wool in a field, two Turks employed in the buſineſs almoſt inſtantaneouſly expired; and ſeveral ſmall birds which happened to fly over the place, dropped down dead immediately.

The uſe of quarantine is, however, not wholly fruſtrated by our ignorance of the exact time required for this purification: ſince it at leaſt ſerves to aſcertain whether the goods are infected or not; it being ſcarce poſſible that every one of thoſe who are obliged to attend them ſhould eſcape hurt, if they are ſo; and the moment any ſuch infection happens, the goods are to be immediately deſtroyed.

The goods ſhould certainly be opened when they are put into the lazaretto, their being there will otherwiſe avail little or nothing. This is the conſtant practice in the ports of Italy; and at Venice, in particular, all bales of cotton, of camels or of beavers hair, and the like, are ripped open from one end to the other, and holes made in them by the porters every day, into which they thruſt their naked arms, that the air may have free acceſs to every part of the goods. That ſome ſuch cautions as theſe ought not to be omitted, is clearly proved by the misfortune which happened in the iſland of Bermudas, about the year 1695;

1695; where a ſack of cotton being put on ſhore by ſtealth, lay above a month without any prejudice to the people of the houſe where it was hid; but, on it's being diſtributed among the inhabitants, it carried ſuch a contagion with it, that the living were ſcarce ſufficient to bury the dead.

Since it has been frequently experienced, that of all the goods which harbour infection, cotton in particular is the moſt dangerous, and Turky is almoſt a perpetual ſeminary of the plague, it is highly reaſonable, that whatever cotton is imported from that part of the world, ſhould at all times be kept in quarantine; becauſe it may have imbibed infection at the time of it's packing up, though no miſchief has been felt from it by the ſhip's company. And the length of time from it's being packed up to it's arrival here, is no certain ſecurity that it is freed from infection. At leaſt, it has been fatally experienced, that the time employed by ſhips in paſſing between Turky and Marſeilles, is not long enough for goods to loſe their infection; as appears not only from the late inſtance, but alſo from an obſervation made in a memorial drawn up by the deputy of trade at that place: and Marſeilles is the only port in France allowed to receive goods from the Levant, on account of the ſeveral ſmall iſlands adjacent, which render it peculiarly convenient for quarantine. It being certain, that goods have retained infection during their paſſage from Turky to Marſeilles, it will hardly be preſumed, in an affair of ſo much importance, that they are likely to loſe all contagion in coming to this country, becauſe the voyage is ſomewhat longer: eſpecially when it is conſidered, that there are ſome few inſtances of goods retaining their infection for a great number of years. An ingenious foreign writer gives a very diſtinct relation of a feather-bed, that was laid by ſeven years on ſuſpicion of it's being infected, which produced ſhocking effects at the end of that great length of time: and a learned gentleman of our own country relates, that ſome cloaths fouled with blood and matter from plague ſores being lodged between matting and the wall of a houſe in Paris, gave the plague ſeveral years after to a workman who took them out, which preſently ſpread through that city.

The reaſon why cotton is ſo peculiarly dangerous, is on account of it's great aptitude to imbibe and retain any ſort of effluvia which approaches it: and a celebrated phyſician once made a particular experiment, by cauſing cotton to be placed for a ſingle day near a piece of putrifying fleſh from an amputated limb, in a bell-glaſs, but without touching it; when the cotton imbibed ſo ſtrong a taint, that being put up in a cloſe box, it retained it's offenſive ſcent near twelve months, and would, he believes, have preſerved it for ſome years. Nor is it to be doubted, if inſtead of the fumes of putrefied fleſh from a ſound body, this cotton had been thus impregnated with the fumes of corrupted matter from a perſon ſick of the plague, but it would have communicated that infection. And the experiment would certainly have ſucceeded alike, in both caſes, if ſilk, wool, or hair, had been incloſed in the veſſel, inſtead of cotton; animal ſubſtances being extremely liable to attract the volatile particles which come from bodies of the ſame nature with themſelves.

Though all reaſonable proviſions ſhould be made both for the ſound and ſick who perform quarantine, yet the ſtrict keeping of it ought to be inforced by the ſevereſt penalties. And where a ſhip comes from any place in which the plague raged with uncommon violence at the time of it's departure, the only ſecure method will be to ſink all the goods, and in ſome caſes even the ſhip; eſpecially if any of the crew have died of the diſeaſe during their voyage.

Nor ſhould this farther caution be omitted; not to open too ſoon a free trade with any recently infected place, becauſe the contagion has ceaſed at the approach of winter; for there are many inſtances of the diſtemper's being ſtopped by the winter cold, and yet the ſeeds of it not deſtroyed, but only kept inactive, till the warmth of the ſucceeding ſpring has given them new life and vigour. Thus, in the great plague at Genoa, about a hundred and twenty years ſince, which continued part of two years, the firſt ſummer about 10,000 died; in the winter hardly any; but during the next ſummer, no leſs than 60,000: and even the laſt plague at London, which appeared towards the latter end of the year 1664, was ſtopped during the winter by a hard froſt of near three months continuance, ſo that there remained no farther appearance of it till the ſpring following. Now, if goods brought from any ſuch place ſhould retain the leaſt particles of the latent contagion, there will be much danger of their producing the ſame miſchief in the place to which they are brought, as they would have occaſioned in that from whence they came.

But, above all, it is neceſſary, to puniſh with the utmoſt rigour the clandeſtine importers of goods; from whoſe wicked practices more danger of bringing this terrible diſeaſe is always to be dreaded, than by any other way whatever.

Theſe are material cautions neceſſary to be obſerved for defending ourſelves againſt contagion from other countries: but the particular manner of putting them in execution, by viſiting of ſhips, and the regulations of lazarettos, muſt be left to the proper officers; who ought, however, to be in general aſſiſted by the advice of ſome ſkilful phyſician.

The next conſideration is, what would be neceſſary to be done, if from any miſcarriage in the public care, by neglect of the proper officers, or otherwiſe, this horrid calamity ſhould be ſuffered to befal us.

There is no evil in the world, in which the great rule of making an early and vigorous reſiſtance, more properly takes place than in the preſent inſtance; and yet it has unfortunately happened, that the common ſteps formerly taken have had a direct tendency to prevent this maxim from being put in practice.

As the plague always breaks out in ſome particular place, the directions of the civil magiſtrate ought certainly to be calculated on ſuch a plan as to render it equally the intereſt of infected families to diſcover their misfortune, as when a houſe is on fire to call in the aſſiſtance of the neighbourhood; whereas, on the contrary, the methods taken by the public, on ſuch occaſions, have always rather reſembled a ſevere diſcipline, and even puniſhment, than any thing of a compaſſionate care; a circumſtance which muſt naturally make the infected conceal as long as poſſible the nature of the diſeaſe.

The orders iſſued out at theſe times have uſually been, (and were particularly ſo during the laſt plague in the year 1665) the moment any houſe was diſcovered to be infected, to keep it ſhut up, with a large red croſs, and theſe words, "*Lord have mercy* "*upon us!*" painted on the door; watchmen attending day and night to prevent any perſon from going in or out, except ſuch phyſicians, ſurgeons, apothecaries, nurſes, ſearchers, and others, as were allowed by authority: and this to continue at leaſt a month after all the family were dead or recovered.

It is difficult to conceive a more ſtriking ſcene of miſery, than that with which this method muſt preſent us. Families locked up from all their acquaintance, though ſeized with a diſtemper which the moſt of any in the world requires comfort and aſſiſtance; abandoned to the treatment of ſome ignorant and unfeeling nurſe; and ſtrangers to every thing but the melancholy progreſs of death among their deareſt ties; with little or no hope of life left to the ſurvivors, and that ſtill blended with the keeneſt and moſt diſtreſſing doubt, whether they ought not to prefer immediate diſſolution, to the wretched and melancholy ſtate of ſurviving their beſt friends and neareſt relations!

If, as all phyſicians agree, fear, deſpair, and dejection of ſpirits, diſpoſe the body to receive contagion, and when received give it additional force, it is difficult to ſay how a diſeaſe can be more encouraged than by ſuch treatment.

Cruelty to individuals can only be juſtified by the general good of the whole community: but, on due conſideration, this expedient will be found to increaſe, not prevent, the progreſs of infection; for while contagion is nurtured in a houſe, and continually increaſed by the daily conqueſts it makes, the air will neceſſarily become ſo tainted, as to ſpread the infection the moment it obtains a paſſage. Shutting up houſes in this manner, is therefore only keeping ſo many ſeminaries of contagion, ſooner or later to be univerſally diſperſed: for waiting a month, or any longer time, from the death of the laſt patient, can have no more avail, than keeping a bale of infected goods unpacked; and the poiſon will in both caſes fly out, whenever the peſtiferous goddeſs opens her deteſted box.

Theſe meaſures, which were certainly owing to ignorance of the true nature of contagion, have unqueſtionably contributed, every time they have been practiſed in this city, eſſentially to prolong the continuance of the plague; and have, no doubt, had the ſame ill effects in other countries.

It is, therefore, by no means ſurprizing, that grievous complaints were frequently made againſt ſo unreaſonable a cuſtom; and that the citizens were conſtantly under the moſt cruel apprehenſions of being thus inhumanly ſhut up. They accordingly concealed the diſeaſe as long as poſſible, and by that means ſpread and increaſed it in a moſt extraordinary manner; and when at length they were confined, they not unfrequently eſcaped, either by bribes or violence, and ſometimes even by murdering the watchmen at their doors: ſo that, in the night, people were often ſeen running about the ſtreets, with hideous ſhrieks of horror and deſpair, and frequently quite diſtracted, either through the violence of the fever, or the terrors of mind into which they were naturally thrown by the daily havock among their kindred.

Under theſe miſerable circumſtances, many got away; and, when they had eſcaped, either went to their friends in the country, built huts or tents for themſelves in the open fields, or got on board ſhips lying in the river: and ſome were ſaved by keeping their houſes free from all communication with their neighbours.

It is to be obſerved, that whenever popular clamour prevailed ſo far as to procure ſome releaſe for the ſick, it was conſtantly followed with a remarkable abatement of the diſeaſe. During the plague in the year 1636, which began with great violence, leave being given by the king's authority for people to quit their houſes, it was obſerved, that not one in twenty of the healthful perſons removed fell ſick, nor one in ten of the ſick died: which ſingle inſtance alone, had there been no other, ſhould have weighed ever after with the magiſtracy againſt too ſtrict confinements. But, beſides this, in a preceding plague, which happened in the year 1625, another inſtance occurs, of a very remarkable decreaſe upon the diſcontinuing to ſhut up houſes. It was, indeed, ſo late in the year, before this was done, that the near approach of winter might doubtleſs be a chief reaſon for the diminution of the diſeaſe which followed; yet, from the ſudden and aſtoniſhing decreaſe, it is at leaſt certain, that the liberty then granted, was by no means an impediment: for this opening of the houſes was allowed of in the beginning of September; and, though during the laſt week in Auguſt there died no leſs than

4218, the burials were the very next week diminiſhed to 3344, and by the fourth week after to 852.

Since, therefore, the management in former times neither anſwers the purpoſe of diſcovering the beginning of the infection, nor of putting a ſtop to it when diſcovered; it is certainly neceſſary to purſue different meaſures: the following plan has therefore been ſuggeſted by a phyſician of indiſputable authority.

In the firſt place, a Council of Health ſhould be eſtabliſhed, conſiſting of ſome of the principal officers of ſtate, both eccleſiaſtical and civil, ſome of the chief magiſtrates of the city, two or three phyſicians, and other ſkilful perſons: this council ſhould be intruſted with ſuch powers, as might enable them to ſee all their orders executed with impartial juſtice; and no unneceſſary hardſhips, under any pretence whatever, ſhould be put on any perſon by the officers they employ.

Inſtead of ignorant old women, who are generally appointed *ſearchers* in pariſhes to inquire what diſeaſes people die of, that office ſhould be committed to intelligent and active men; whoſe buſineſs ſhould be, as ſoon as they diſcovered any perſon to have died after an unuſual manner, (particularly with livid ſpots, buboes, or carbuncles) to give notice to the council of health; who ſhould immediately ſend ſkilful phyſicians to examine the ſuſpected bodies, and to viſit the houſes in the neighbourhood, eſpecially of the poorer ſort, among whom this evil generally begins. And if, on their report, it appears that a peſtilential diſtemper has broke out, they ſhould immediately order the ſeveral infected families to be removed; the ſick being ſent to different places from the ſound: but the houſes for both ſhould be three or four miles out of town; and the ſound people ſhould be ſtripped of all their cloaths, and waſhed and ſhaved before they enter their new lodgings. Theſe removals ought to be made in the night, when the ſtreets are clear of people; which will prevent any danger of ſpreading the infection. And, beſides, every precaution ſhould be taken to provide ſuch means of conveyance as may prevent the ſick from receiving injury.

Though this management is neceſſary with reſpect to the poor and meaner ſort of people; yet the rich, who have conveniences, may, inſtead of being carried to lazarettos, be obliged to go to their country-houſes; care being taken to keep the ſound ſeparated from the infected. And all the inhabitants who are yet well ſhould be permitted, and even encouraged to leave the town, which will be the more healthy in proportion to the numbers who avail themſelves of this advantage.

In the mean time, compaſſion and care ſhould by no means be wanting to the diſeaſed; to whom, when lodged in clean and airy habitations, there would, with due cautions, be no great danger in giving attendance. All expences ſhould be paid by the public; and no charges ought to be conſidered, which are capable of preſerving a whole nation from the greateſt of human calamities. Nor does it ſeem at all unreaſonable, that a reward ſhould be given to any perſon who firſt makes diſcovery of the infection in any place; ſince making known the evil to thoſe who are provided with proper methods againſt it, is inconteſtibly the firſt and principal ſtep towards ſubduing the enemy.

And though the methods taken in other countries, as well as in our own, have been uſually different from thoſe here recommended; yet inſtances of the extraordinary ſucceſs attending theſe meaſures, whenever they have happened to be put in practice, frequently occur.

The magiſtrates of the city of Ferrara in Italy, in the year 1630, when all the ſurrounding country was infected with the plague, obſerving the ill ſucceſs which attended the conduct of their neighbours, (who, through the fear of injuring their commerce, endeavoured all in their power to conceal the diſeaſe, by keeping the ſick confined to their houſes) reſolved, ſhould occaſion require, to purſue a different method. Accordingly, on the inſtant they received information that a perſon in their city was dead of the peſtilence, they immediately removed the whole family, conſiſting of ſeven perſons, into a lazaretto, where they all likewiſe died: but though the diſeaſe was thus malignant, it ſpread no farther, being ſuppreſſed at once by this method. Within the ſpace of a year the ſame caſe occurred ſeven or eight times; and this management every time put a ſtop to it. The example of this city was afterwards repeatedly followed by ſome other towns in the ſame territory, with ſo much ſucceſs, that it was thought expedient, for the general good, to publiſh in the memoirs of the people of Ferrara, this declaration: "that the only remedy againſt the plague "is to make the moſt early diſcovery of it "poſſible, and thus to extinguiſh it in the "very beginning."

During the plague at Rome, in the year 1657, when the diſeaſe had ſpread itſelf among both rich and poor, and raged in the moſt violent manner, the pope appointed Cardinal Gaſtaldi to be the commiſſary general of health, giving him the temporary power of the whole ſacred college, with full commiſſion to do whatever he ſhould judge neceſſary. Accordingly, he gave ſtrict orders, that no ſick or ſuſpected perſons ſhould ſtay in theirown houſes. The ſick he removed, on the firſt notice, to a lazaretto in the iſland of the Tyber; and all who were in the ſame houſes with them to other hoſpitals juſt without the city, in order to be ſent to the iſland if they ſhould fall ſick; taking diligent care, at the ſame time, to ſend away their goods to be cleanſed and purified in an airy place.

Theſe regulations were executed with ſo much ſtrictneſs, that perſons of the higheſt quality were not exempted from this treatment; which, at firſt, occaſioned great complaints againſt the cardinal for his ſeverity: but he ſoon after received their general thanks; for, in two months, by theſe means, he entirely cleared the city of the peſtilence, which had almoſt two years infeſted it. And it was particularly noticed, that though before, when once the diſeaſe had got into a houſe, it ſeldom ended without ſeizing the whole family; yet, under this management, ſcarce one in twenty of the ſound perſons removed were at all infected.

The plague at Marſeilles was likewiſe ſtopped a full fortnight by the ſame meaſures; and probably might have been wholly ſubdued, if it had not received new force from the unſeaſonable confidence of the inhabitants upon this intermiſſion; which, indeed, appears to have been ſo great, that they would not believe the plague had been at all among them, and publicly upbraided the phyſicians and ſurgeons for terrifying them without cauſe. No doubt, therefore, they at this time ſo much neglected the cautions neceſſary for their ſecurity, as to leave no room for ſurprize, that the diſeaſe ſhould again break out, with too great violence to be a ſecond time overcome.

But, beſides theſe examples in foreign countries, we have one inſtance of the ſame nature nearer home. When the plague was laſt in England, on it's firſt entrance into Poole in Dorſetſhire, the magiſtrates immediately ſuppreſſed it, by removing the ſick into peſt-houſes without the town, as is well remembered there to this time. Indeed, a very remarkable occurrence has greatly contributed towards preſerving all the circumſtances of this tranſaction in memory. After the removal of the ſick, the inhabitants found ſome difficulty in procuring any perſon to attend them; upon which they engaged a young woman, then under ſentence of death, in that ſervice, on a promiſe to uſe their intereſt for obtaining her pardon: ſhe accordingly attended

tended them with great care and tenderneſs, and yet eſcaped the contagion; but neglecting to ſolicit the corporation for the accompliſhment of their engagement with her, ſhe was, on a quarrel between them, three or four months afterwards, barbarouſly hanged by the mayor.

It is to be obſerved, that as the advice here given is founded on this principle, that the beſt method for ſtopping infection, is to ſeparate the healthy from the diſeaſed; in ſmall towns and villages, where ſuch a meaſure is practicable, if the ſound remove themſelves into barracks, or ſuch airy habitations, it may probably be even more uſeful than to remove the ſick: and this method has been found beneficial in France, after all others have failed. But the ſucceſs ſtill proves the neceſſity of removing the ſick, where the other method cannot be conveniently practiſed.

When the ſick families are gone, all the goods of the houſes in which they reſided ſhould be buried deep under ground: and this ſeems preferable to burning them; becauſe, eſpecially in a cloſe place, ſome infectious particles may poſſibly be diſperſed by the ſmoke through the neighbourhood; as is related to have happened at Venice, where the plague was augmented by burning a large quantity of infected goods in the city. And a learned phyſician has communicated the relation of a caſe, given him by an apothecary, who was at the place when the circumſtance happened, not unworthy of notice. At Shipſton, a little town on the river Stour, in Worceſterſhire, a poor vagabond was ſeen walking in the ſtreets with the ſmall-pox upon him. The people being terrified, took care to have him conveyed to a ſmall houſe, ſeated on a hill, at ſome diſtance from the town, and provided him with neceſſaries. In a few days the man died; and they ordered him to be buried deep in the ground, and the houſe with his cloaths, to be burnt. The wind being pretty high, blew the ſmoke upon the houſes on one ſide of the town: and in that part, a few days after, eight perſons were ſeized with the ſmall-pox. So dangerous is heat in all kinds of peſtilential diſtempers, and ſo diffuſive of contagion. And the houſes may likewiſe be demoliſhed or pulled down, if they are remote enough from others, and it can conveniently be done; otherwiſe it may be ſufficient to thoroughly cleanſe and then plaiſter them over. All poſſible care ought ſtill to be taken for the removal of whatever cauſes are found to breed and promote contagion: for which purpoſe, the overſeers of the poor (who might in this caſe be aſſiſted by other officers) ſhould viſit the habitations of all the meaner inhabitants; and where they find them too cloſely confined, and living in a dirty crouded manner, ſhould leſſen their number, by ſending ſome into better lodgings, and uſe every precaution, by encouragement and aſſiſtance, to render them more cleanly and wholeſome.

No good work carries with it it's own reward ſo much as this kind of charity; and therefore, whatever the expence may be, it ſhould never be adminiſtered with a ſparing or grudging hand: for nothing approaches ſo near to the firſt original of the plague, as air pent up, loaded with damps, and corrupted with that kind of filthineſs which proceeds from animal bodies.

And of this our common priſons afford a ſtriking inſtance, where very few eſcape what is called the gaol fever, which is always attended with a degree of malignity in proportion to the cloſeneſs and ſtench of the place: and it certainly becomes the wiſdom of government, as well with regard to the health of the public, as in compaſſion to the priſoners, to take care that all houſes of confinement are kept as airy and clean as is conſiſtent with the purpoſes for which they are intended.

The black aſſize at Oxford, held in the caſtle, in the year 1577, will never be forgot; at which the judges, gentry, and almoſt all who were preſent, to the number of three hundred, were killed by a poiſonous ſteam; which ſome imagined to have iſſued from the earth, but which a noble and great philoſopher more juſtly ſuppoſed to have been brought by the priſoners, who alone remained free from injury, out of the gaol into court.

While this care is taken of houſes, the proper officers ſhould be ſtrictly charged to ſee that the ſtreets be waſhed and kept clean from filth, carrion, and all manner of nuiſances, which ſhould be carried away in the night: nor ſhould layſtalls be ſuffered to be too near the city. Beggars and idle perſons ſhould likewiſe be taken up; and ſuch miſerable objects as are neither fit for the common hoſpitals, nor work-houſes, ſhould be provided for in an hoſpital of incurables.

Orders of this kind are, indeed, at all times neceſſary to be obſerved, eſpecially in populous cities: and, though it muſt be acknowledged we have of late years greatly improved in the article of cleanlineſs, particularly in the metropolis, owing to ſome excellent ſtatutes which parliament have of late years very wiſely provided for that purpoſe, yet it is perhaps ſtill to be lamented, that they are not always ſufficiently enforced.

If the early precautions we have mentioned prove ſucceſsful, no methods of correcting the air, purifying houſes, or rules for preſerving particular perſons from infection, will be neceſſary; to all which, nevertheleſs, ſhould the plague increaſe, ſo as to render the ſick too numerous for removal, (which would certainly be the caſe did the diſeaſe rage for a conſiderable time) regard may ſtill be had.

With reſpect to the correction of the air, fire has been almoſt univerſally recommended, both by ancient and modern writers; who have adviſed to make frequent and numerous fires in the towns infected. This precept, however, is almoſt wholly founded on a tradition that Hippocrates ſubdued a plague in Greece by this means. But it is obſervable that no mention is made of any ſuch circumſtance in the works of that great man. The beſt authority for the truth of this report, is the teſtimony of Galen, though it is alſo mentioned by other authors. Galen, recommending theriaca as a preſervative againſt the peſtilence, has thought proper to compare it to fire: and, upon this conceit, relates, that Hippocrates cured a plague, which came from Ethiopia into Greece, by purifying the air with fires, into which were thrown odoriferous herbs and flowers, together with ointments of the fineſt flavour. It is remarkable, that among the epiſtles aſcribed to Hippocrates, which, though not genuine, are yet older than Galen, there is a decree ſaid to be made by the Athenians in honour of this father of phyſicians, which, mentioning the ſervice he had done his country in a plague, ſays only, that he ſent his ſcholars into ſeveral parts, with proper inſtructions to cure the diſeaſe. From which it ſhould ſeem, that this ſtory of the fires was hardly or not at all known when theſe letters were compiled. And Soranus yet more confirms that it was framed long after the death of Hippocrates; for he only ſays generally, that Hippocrates foretold the coming of the peſtilence, and took care of the cities of Greece; without any mention of having uſed this particular expedient. Plutarch, indeed, ſpeaks of a practice like this, as commonly approved among phyſicians, which he makes uſe of to illuſtrate a certain cuſtom of the Egyptians; who, he ſays, purify the air by the fumes of reſin and myrrh, as phyſicians correct it's foulneſs, and attenuate it's thickneſs, during the times of peſtilence, by burning ſweet-woods, juniper, cypreſs, and the like.

This is the ſum of what can be learned from antiquity as to this point; whence we may diſcover, that writers have in this caſe declared a little too haſtily for the uſe of common fires, on the authority and from the example of Hippocrates, even allowing the fact as related by Galen: nor will it from thence appear that Hippocrates himſelf relied upon them, ſince he thought it neceſſary to take in the aſſiſtance of aromatic fumes. But, as the fact is not grounded upon ſufficient authority, it is needleſs longer to inſiſt upon it. The paſſage from Plutarch will better explain what was the ſentiment of thoſe phyſicians who approved the practice. It ſeems, they expected from thence to diſpel the thickneſs and foulneſs of the air. And, no doubt, ſuch evil diſpoſitions of the air, as proceed from damps, exhalations, and the like, may in ſome meaſure be corrected even by common fires, and it's prediſpoſition to receive infection from theſe cauſes ſometimes removed. But this method, if it be neceſſary, ſhould be put in practice before the arrival of the peſtilence: for when the diſtemper is once actually begun, and rages, as it is known to be ſpread and increaſed by the heat of the ſummer, and checked by the cold in winter, whatever increaſes that heat, will undoubtedly add force to the diſeaſe. And Mercurialis takes notice, that ſmiths, and all thoſe who worked at the fire, ſuffered moſt ſeverely during the plague at Venice in his time. Whether the ſervice fires may effect by correcting any other ill qualities of the air, will counterbalance their inconvenience in this reſpect, experience only can determine; and the fatal conſequences of the trials made here in the laſt plague, are more than ſufficient to diſcourage any farther attempts of the like nature: for, fires being ordered in all the ſtreets for three days together, 4000 perſons died in one night following; a number conſiderably more than half the amount of any ſingle week's deceaſed, either before or after. And, on making the ſame experiment, in the laſt plague at Marſeilles, the contagion every day ſpread more and more through the city with increaſed rage and violence.

What has been ſaid reſpecting fires, is likewiſe to be underſtood as to firing of guns, which ſome have too raſhly adviſed. The proper correction of the air, would be to make it freſh and cool: and accordingly, the Arabians, who are beſt acquainted with the nature of peſtilences, adviſe people to keep themſelves as airy as poſſible, and to chuſe dwellings expoſed to the wind, ſituate high, and refreſhed with running waters.

With reſpect to purifying houſes, the firſt care ought to be to keep them clean; for as naſtineſs is a great ſource of infection, ſo cleanlineſs is the greateſt preſervative: which ſhews us the true reaſon, why the poor are moſt liable to contagious diſeaſes. It is remarked of the Perſians, that though their country is ſurrounded every year with the plague, they ſeldom or never ſuffer any thing from it themſelves: and it is likewiſe known, that they are the moſt cleanly people of any in the world; and that many among them make it a great part of their religion, to remove filthineſs and nuiſances of every kind from all places about their cities and dwellings.

Beſides, the Arabians adviſe the keeping houſes cool, as another method of purifying them; and for this purpoſe ſtrew them with cooling herbs, ſuch as roſes, violets, water-lilies, and the like, and waſh them with water and vinegar; than all which, eſpecially the laſt, nothing more proper can be propoſed. It is alſo not improper to fume houſes with vinegar, either alone or with nitre, by throwing it on a hot iron or tile; though directly contrary to what modern authors uſually adviſe; who make fumes with hot drugs, ſuch as benzoin, frankincenſe, ſtorax, and the like, from which there can be no reaſon to expect any virtue likely to deſtroy the matter of infection, or to preſerve particular places from a diſpoſition to receive it, which are the only things in this caſe to be attempted. The ſmoke of ſulphur, as it abounds with an acid ſpirit, which is found by experience to be very penetrating, and to poſſeſs great power in repreſſing fermentations, may perhaps be productive of good effects in this way.

Hot fumes appearing to be in general uſeleſs, the ſteams of poiſonous minerals ought to be eſteemed dangerous; and the uſe of all fumigations with mercury or arſenic conſequently avoided. Much leſs adviſeable is the practice of wearing arſenic on the pit of the ſtomach as an amulet; ſince this has been often attended with very ill conſequences, and is not grounded on any probable authority, being in all likelihood derived from an error in miſtaking the Arabian word *darſini*, which ſignifies *cinnamon*, for the Latin *de arſenico*.

The next conſideration, after the purifying of houſes, is by what means particular perſons may beſt defend themſelves againſt contagion; for the certainty of which, it would be neceſſary to put the humours of the body into ſuch a ſtate as might render them unalterable by the matter of infection: but as this is no more to be hoped for, than a ſpecific preſervative from the ſmall-pox; the moſt that can be done, is to keep the body in ſuch order that it may ſuffer as little as poſſible. The firſt ſtep is, to maintain a good ſtate of health, in which we are always leaſt liable to ſuffer by external injuries; and not to weaken the body by evacuations. The next, is to guard againſt all dejection of ſpirits, and immoderate paſſions, which are daily obſerved to expoſe perſons to the more common contagion of the ſmall-pox. Theſe ends will be beſt anſwered by living with temperance on a good generous diet, and by avoiding faſtings, watchings, and extreme weerineſs.

Another defence may be derived from the uſe of any thing proper to keep the blood from inflaming; which, if it does not ſecure from contracting the infection, will at leaſt make it's effects leſs violent: and the beſt means for this purpoſe, according to the advice of the Arabian phyſicians, is the repeated uſe of acid fruits, ſuch as pomegranates, Seville oranges, lemons, or tart apples; but, above all, of wine vinegar in ſmall quantities, rendered grateful to the ſtomach by the infuſion of ſome ſuch ingredients as gentian-root, galangal, zedoary, or juniper-berries; which medicines, by correcting the vinegar, and taking off ſome ill effects it might otherwiſe have upon the ſtomach, will be of great uſe: but theſe, and all other hot aromatic drugs, though much recommended by ſome authors, if uſed alone, are more likely to prove prejudicial, by over-heating the blood, than to anſwer any good purpoſe.

Iſſues are likewiſe recommended by an eminent phyſician; the propereſt place for which is the inſide of the thigh, a little above the knee. And as the ſmoaking tobacco is much applauded by ſome, and may be put in practice without any great inconvenience, it may not be improper to give it a fair trial.

But none of theſe methods promiſe any certain protection, and leaving the infected place is the ſureſt preſervative; next to which, avoiding as much as poſſible any near approach to the ſick, or to ſuch as are but recently recovered, are the moſt likely means of eſcaping infection; for the greater ſecurity of which it will be proper to avoid all crowds of people: and, indeed, the magiſtrates ſhould not only prohibit unneceſſary aſſemblies, but likewiſe oblige all ſuch perſons as recover from the diſeaſe, to confine themſelves for ſome time, before they appear abroad.

The advice to keep at a diſtance from the ſick, muſt alſo be underſtood to extend to dead bodies; which ſhould be buried at a conſiderable diſtance from any dwelling-houſes, put deep in the earth, and covered with the exacteſt care; but not with quick-lime thrown into the grave, as has been cuſtomary in foreign parts; and which, being thrown into a fermentation by the acid humours of the putrified body, may occaſion exhalations from the ground of ſo noxious a quality, as to ſpread the infection to a very conſiderable diſtance. Nor ſhould the carcaſes of thoſe who die of this diſeaſe, be kept long unburied, or expoſed to the heat of the ſun in the way to interment: they ſhould be carried out in the cool of the night, and as ſoon as poſſible after death; in which caſe there will be no great danger of communicating the contagion in this way.

For thoſe to whoſe lot the melancholy and dangerous office of attending the ſick falls, farther cautions and directions are neceſſary: among the former, they ſhould be ſtrictly enjoined not to ſwallow their ſpittle, whilſt they are immediately employed in the ſervice of the diſeaſed, but to emit their ſaliva carefully and frequently; nor ſhould they ever draw in their breath, without moving from the bed-ſide, and, if poſſible, towards the window: it has been already obſerved, that infection received by the mouth or noſtrils, generally produces the diſorder in it's moſt malignant ſtate. To theſe precautions ſhould be added, directions to waſh the mouth frequently with warm vinegar, and to apply a ſpunge wetted with the ſame liquid to the mouth and noſtrils, as often as it ſhall become neceſſary to approach the bed, or to move the ſick perſon in it.

Theſe ſeem to be the beſt rules which can be offered to individuals, for ſtopping the progreſs of this diſeaſe; and they have been approved by writers of the firſt abilities and experience: but other public methods muſt be adopted to check it's courſe through countries, and prevent the deſolation of cities and towns.

For this end, many meaſures have been propoſed, and in ſome inſtances executed even to a degree of cruelty: when the plague prevailed in France, in the laſt and preceding centuries, lines were drawn round the infected towns, and guards placed at every poſſible avenue, to prevent the eſcape of any of the yet uninfected inhabitants; but this ſeverity ſeemed to condemn to inevitable death, the unfortunate victims againſt whom it was directed; and to convert to human puniſhment the diſpenſations of Divine Providence.

It has alſo been propoſed, and with an equal appearance of judgment and humanity, to ſurround the infected place with double lines, one near the town, and the other at a conſiderable diſtance; to ſuffer ſuch of the inhabitants as ſtill remain in health, to paſs the firſt without reſtraint, but not to return; and to provide them with tents in the ſpace between the two lines, where they might perform a reaſonable quarantine, and paſs through ſuch purifications as might be thought neceſſary: nor ſhould they be permitted to go at large without a proper certificate of their having conformed in all reſpects to the regulations preſcribed; and without their being diveſted of every article of cloathing which has been worn during this purgation.

And this will undoubtedly prove a more effectual method of avoiding the communication of infection to neighbouring towns and villages, than any endeavours to prevent the healthy from eſcaping. Human vigilance is hardly equal to ſuch a reſtraint; and where the price of the eſcape is held at no leſs value than life itſelf, no means will be left untried to effect it; many, no doubt, will fail, but ſome will ſucceed in the attempt, which has frequently been known to happen, in ſpite of the utmoſt care; and one who eſcapes in this clandeſtine way, will be more likely to carry with him the infection, and ſpread it to uninfected places, than a hundred, or even a thouſand, who are permitted to depart, after having ſtrictly conformed to the regulations which we have pointed out.

To this may be added, that by confining the whole inhabitants of a place to a narrow compaſs, preventing the healthy from eſcaping, and compelling them to ſubmit to all the horrors of their impending fate; the numbers of the diſeaſed will be neceſſarily increaſed, the diſtemper will rage with augmented fury, and the air itſelf will become ſo contaminated, as to convey the contagion to remote diſtances, and elude the purpoſes intended by theſe acts of extraordinary and cruel caution. And this actually happened in the early part of the laſt century, at Digne in France, where the line being drawn, and the inhabitants cloſely confined, not above ſix or ſeven perſons eſcaped the infection out of ten thouſand, and not above fifteen hundred ſurvived of the laſt-mentioned number; yet, the ſame town being again afflicted with a peſtilence a very few years after, and a different conduct being obſerved, the uninfected being permitted to depart under proper cautions, the progreſs of the diſeaſe was ſoon ſtopped, and not above one hundred lives were loſt: and though in the former caſe the diſorder made it's appearance in many neighbouring towns, yet in the latter no ſuch effect followed.

But though this indulgence, with reſpect to the perſons of the inhabitants, is dictated both by policy and humanity, yet it ought to extend no farther; no cloaths, no goods, no merchandize, ſhould be ſuffered to paſs the lines; the ſeeds of the contagion will lurk in almoſt every article of commerce; and by permitting any removal of effects, the diſeaſe may not only be communicated to the vicinity, but may be carried to the moſt remote diſtances; and it becomes the cauſe of humanity to prevent infection from being conveyed to places where the air being by any accidental means in a corrupted ſtate, the fatal fire may catch, and the unhappy inhabitants, ignorant of their ſituation, may become ſacrifices to the imprudence or avarice of thoſe who ought to guard againſt ſuch fatal and irreſiſtible evils. The conſequences of ſuch neglect have been frequently and ſeverely felt, and in two very particular inſtances, when the plague laſt reigned in theſe kingdoms: the firſt, when the plague was conveyed to Poole, in Dorſetſhire, (where it afterwards made horrid devaſtation) in the pack of a pedlar, who had travelled from London; and the ſecond, that a box of goods being ſent from that metropolis to a taylor at Eham, in Derbyſhire, and the ſervant who opened it finding the contents damp, and approaching the fire to dry them, was immediately ſeized with the plague, and died; and the diſorder having attacked and deſtroyed the maſter and all his family, except his wife, proved fatal to no leſs than two or three hundred perſons in a ſmall village and pariſh, and was at laſt ſtopped, and the communication of it prevented, by ſome ſuch means as we have above recommended.

In ſpeaking of the cure of this diſeaſe, it will be neceſſary to recur to a remark made in the former part of this chapter: that the plague and ſmall-pox bear a great ſimilitude to each other; that they are both contagious fevers; that they have both been imported from Africa into Europe; that the appearance of both is marked by certain eruptions; and that, as the ſmall-pox has been divided into two ſpecies, the diſtinct, and the confluent, from the different appearances of the puſtules or eruptions, ſo the plague is alſo attended by two ſorts of eruptions or tumors.

In the mild or diſtinct ſmall-pox, the puſtules become prominent, riſe high above the ſurface of the ſkin, and are filled with a well-digeſted matter; but in the confluent ſort, the puſtules are flat, and contain only a thin, acrid, and watery humour; and the two kinds of critical humours which mark the plague, are alſo diſtinguiſhed by appearances ſtill more different; in the moſt favourable caſe, the diſeaſed matter is expelled towards the ſurface of the body, and falls upon the glandular parts which are moſt ſuperficial, ſuch as the groin, the arm-pit, or behind the ear; and the firſt appearance is a ſmall hardneſs, heat, redneſs, and an acute piercing pain near theſe glands; if the diſeaſe ends happily, and the patient recovers, theſe tumors diſcharge the diſeaſe by a proper ſuppuration, like the eruption of the diſtinct ſmall-pox; in the worſt and moſt dangerous caſe, carbuncles appear inſtead of tumors, and in other parts of the body rather than among the glands; theſe carbuncles firſt appear in a very ſmall hardneſs in the ſkin, which becomes in the particular places affected of a duſky red colour, and the patient ſuffers by intenſe heat and great pain in the part; a blackiſh ſpot ſoon ſhews itſelf in the center of the carbuncle, which is the commencement of the gangrene, and increaſes in ſize, and ſpreads, till the mortification becomes univerſal.

But beſides theſe particular black ſpots in the ſeveral carbuncles, others alſo appear on different parts of the body, and are the certain ſigns of approaching death, and in this ſymptom alſo, the ſimilarity of the plague and ſmall-pox is very diſtinguiſhable, the ſame appearances being very common in the laſt-mentioned diſorder, and producing generally the ſame fatal effects; in both diſtempers, too, when they are peculiarly malignant, diſcharges of blood by the mouth, in the urine, and the like, are by no means unuſual; and it has been univerſally admitted, that internal mortifications are the immediate cauſes of death in both diſeaſes.

The analogy between the diſorders being thus evident, it may naturally be inferred, that the means of cure muſt be nearly the ſame; antidotes and ſpecific medicines are no more to be relied on in the one diſorder than in the other, but the ſame rational mode of treatment muſt be purſued in both.

In the management of the ſmall-pox, we have already ſhewn that the great objects are, to clear the firſt paſſages, to regulate the fever, and to promote in ſome degree the natural diſcharges; in the plague the ſame path is pointed out, with this difference, that as the fever is more acute, the ſtomach and bowels are ſometimes inflamed, and require the adminiſtration of medicines, which are uſually wholly unneceſſary in the ſmall-pox; the eruptions alſo demand external applications, which is not the caſe with the puſtules of the laſt named diſeaſe; and it is of great importance that the ſtate of the inteſtines ſhould be attended to, becauſe if they are diſcovered to be inflamed, emetics ſhould be given ſparingly, and thoſe of the very mildeſt kind; it is indeed adviſable to omit vomiting wholly, if upon the firſt ſeizure of the patient there are any indications of an inflammation having already taken place.

When the fever is extremely acute, as is generally the caſe, the cool regimen which has been adopted with ſo much ſucceſs in the ſmall-pox, will be ſtill more neceſſary in this diſeaſe; but ſhould the heat decline too rapidly, and the pulſe become languid, it may be proper to admit ſuch moderate cordials as have been already allowed in caſes of the ſmall-pox where the like changes take place.

But whether the eruptions conſiſt of glandular tumors or carbuncles, they muſt not be left to the courſe of nature; every effort muſt be uſed to bring them to ſuppuration, and the means employed for this purpoſe muſt be the ſame in both caſes; the application of a cupping-glaſs, without ſcarifying, hath been recommended on the firſt appearance of either; and as there is always great emergency and extreme danger, till the tumors are filled with matter, this method may probably haſten the formation of it: as ſoon as the glaſs is removed, a digeſtive cataplaſm may be applied, or a plaiſter of the warm gums.

But if a ſuppuration cannot be procured, which is generally the caſe of the carbuncle, if a thin watery humour oozes through the pores, if the tumor feels ſoft to the touch, or if it is covered with a black cruſt, it ought to be immediately opened by inciſion; and if any part of it is mortified, as frequently happens in the carbuncle, it muſt be ſcarified without delay, and the bleeding ſhould be ſtopped by the actual cautery, after which the wound may be dreſſed with doſſils or pledgets of lint, firſt ſpread with a digeſtive made with turpentine and yolk of egg, and then dipped in a mixture of two parts of warmed oil of turpentine, and one part of ſpirit of ſal-ammoniac, or in balſam of turpentine; and the whole muſt be covered with an anodyne cataplaſm.

On the following day the wounds may be well bathed, with fomentations made of warm aromatic herbs, with the addition of ſpirit of wine; and if this ſucceeds to make the wounds digeſt, and to ſeparate the ſloughs, they may afterwards be healed as ulcers occaſioned by ordinary abſceſſes.

When the glandular tumors are brought to ſuppurate, it will be dangerous to wait till the matter makes it's way to the outer ſkin, they ſhould rather be opened as ſoon as they arrive at any moderate ſize; becauſe as theſe tumors are frequently ſeated deep in the gland, they are apt to mortify before the ſuppuration reaches the ſurface.

But though this is the only method in which the plague can be treated, following the natural courſe of the diſtemper, yet notwithſtanding the utmoſt care, the patient runs ſo great a hazard from the rapid progreſs of the diſeaſe, which threatens death whilſt the cure is attempting; that phyſicians have endeavoured to diſcover ſome artificial diſcharges for the corrupted humours; and one of our own country, juſtly celebrated for learning, judgment, and experience, is ſaid to have tried with ſucceſs, copious bleedings and profuſe ſweatings, both which evacuations, however, he thinks, are only admiſſible in the very beginning of the diſeaſe, and before any aggravated ſymptoms have taken place; and that no hope can be entertained of their proving beneficial, unleſs they are more copious than can be juſtified in any other diſeaſe of leſs immediate danger and emergency.

The quantity of blood neceſſary to be taken away, can only be determined by the particular circumſtances of each diſtinct caſe, the beſt general direction that can be given, is to draw it with a liberal hand; for in a caſe deſperate as this, it is certainly more prudent to run ſome hazard of exceeding, than to let the patient periſh for want of a neceſſary degree of boldneſs.

The ſweats ſhould rather be promoted by ſome aromatic decoction, ſuch as ſnake-root or the like, than by ſuch ſolid medicines as are uſually given to excite perſpiration; theſe decoctions may be rendered palatable by the addition of the juices of lemons and oranges, or other acids, which will alſo contribute to check the tendency to putrefaction.

But if, on a ſubject of ſuch importance, and of ſo delicate a nature, we may venture to offer an opinion of our own, which however we do with diffidence, and merely as a hint to thoſe whoſe ſituations enable them, and whoſe benevolence prompts them to puſh the means of prevention to the utmoſt extent; we cannot help earneſtly wiſhing, that in thoſe countries where the plague prevails frequently, and where it's unwelcome viſits are annually expected, the practice of inoculation might be tried. The opinions of the ableſt writers have determined the analogy between the plague and the ſmall-pox. The fury of the latter, long the peſtilence of the weſtern world, has given way to this ſalutary preſervative, and it has almoſt ceaſed to be the dread and horror of mankind; perhaps the ſame happy expedient might prove equally ſucceſsful in blunting the arrows of the peſtilence, and diſarming the moſt fatal of all diſeaſes of the terrors which have too long attended this ſcourge of the human race.

Nor can this experiment be attended with any conſiderable degree of danger, after the diſeaſe has been fully aſcertained to be that ſpecies of the plague or peſtilence, which, like the ſmall-pox, never viſits the patient more than once in his life; of the inhabitants of an infected town, though many may eſcape the contagion, few can entertain hopes of this exemption; and when to this great probability of being immediately attacked by it, we add the danger of future viſitations, which, in thoſe countries that are moſt ſubject to the ravages of this diſeaſe, are expected at certain ſtated periods, it is no very unwarrantable conjecture to conceive, that a method may be found to convey the infection, by way of inoculation, in ſuch a manner, and under ſuch regulations, regimen, and medical management, as to produce the diſeaſe in a very ſlight degree, robbed of the terrors which at preſent attend it's approach, and to render it little more formidable than other epidemic diſeaſes.

Nor would the benefit of ſuch a diſcovery be confined to the immediate ſalvation of individual lives; by modifying the matter in ſuch a way, it's malignity may in a courſe of time abate, and the natural attacks of the diſeaſe prove leſs fatal: and ſhould this expedient be found generally ſucceſsful, the inhabitants of an infected town would fly to it as an immediate refuge, and from time to time ſtill leſs ſubjects would be left for it's periodical viſits, till it's whole force was expended, and it ceaſed to be even epidemic.

Perhaps ſome apology may be neceſſary for having dwelt ſo long on a diſeaſe which has for ſuch a length of time withdrawn it's baneful influence from the Iſland of Great Britain; but our work is intended for the voyager and traveller, as well as the reſident of theſe kingdoms; to theſe it may be immediately important to be well informed of the nature, ſymptoms, prevention, and cure of a diſorder, which is rendered more dangerous, by the general ignorance which prevails concerning it, and more particularly in the very countries which are moſt frequently viſited by it: nor ought we to reſt aſſured, that becauſe Providence has protected this happy iſland from it's ravages for more than a century, it will therefore never reviſit it; to avoid ſuch an enemy, every precaution that can be offered is of value; and to be prepared with means to meet and conquer it, is an object well worthy our moſt ſerious attention.

We ſhall conclude this chapter with a Table of the devaſtation committed in the city of London, by the peſtilence in the memorable year 1665, which may anſwer the double purpoſe of gratifying the curioſity of our readers, and convincing them of the vaſt importance of the ſubject which we have juſt diſcuſſed.

FUNERALS in the ſeveral Pariſhes within the Bills of Mortality of the City of LONDON, in the Year 1665; diſtinguiſhing the Deaths occaſioned by the PLAGUE.

	Funerals	Pla.		Funerals	Pla.		Funerals	Pla.
ST. Alban's, Wood Street	200	121	St. Foſter's	144	105	St. Martin's, Ludgate	196	128
St. Alhallows Barkin	514	330	St. Gabriel's, Fenchurch	69	39	St. Martin's Orgars	110	71
St. Alhallows, Bread Street	35	16	St. George's, Botolph Lane	41	27	St. Martin's Outwich	60	34
St. Alhallows the Great	455	426	St. Gregory's by Paul's	376	232	St. Martin's Vintry	417	349
St. Alhallows, Honey Lane	10	5	St. Helen's	108	75	St. Matthew's, Friday Street	24	6
St. Alhallows the Leſs	239	175	St. James's, Duke's Place	262	190	St. Maudlin's, Milk Street	44	22
St. Alhallows, Lombard Street	90	62	St. James's, Garlickhithe	189	118	St. Maudlin's, O. Fiſh Street	176	121
St. Alhallows Staining	185	112	St. John Baptiſt's, Walbrook	138	83	St. Michael's, Baſſiſhaw	253	164
St. Alhallows the Wall	500	356	St. John the Evangeliſt's	9	—	St. Michael's, Cornhill	104	52
St. Alphage	271	115	St. John's Zachary	85	54	St. Michael's, Crooked Lane	179	133
St. Andrew's Hubbard	71	25	St. Lawrence, Jewry	94	48	St. Michael's, Queenhithe	203	122
St. Andrew's Underſhaft	274	189	St. Lawrence, Pountney	214	140	St. Michael's Quern	44	18
St. Andrew's Wardrobe	476	308	St. Leonard's, Eaſtcheap	42	27	St. Michael's Royal	152	116
St. Anne's, Alderſgate	282	197	St. Leonard's, Foſter Lane	335	255	St. Michael's, Wood Street	122	62
St. Anne's, Black Friars	652	467	St. Magnus	103	30	St. Mildred's, Bread Street	59	26
St. Antholin's	58	35	St. Margaret's, Lothbury	100	66	St. Mildred's, Poultry	68	46
St. Auſtin's	43	20	St. Margaret Moſes	38	25	St. Nicholas Acon's	46	28
St. Bartholomew's, Exchange	73	51	St. Margaret's, N. Fiſh Street	114	66	St. Nicholas Coleabby	125	91
St. Bennet's, Finch	47	22	St. Margaret Patton's	49	24	St. Nicholas Olave's	90	62
St. Bennet's, Gracechurch	57	41	St. Mary's, Abchurch	99	54	St. Olave's, Hart Street	237	160
St. Bennet's, Paul's Wharf	355	172	St. Mary's, Aldermanbury	181	109	St. Olave's, Jewry	54	32
St. Bennet's Sherehog	11	1	St. Mary's, Aldermary	105	75	St. Olave's, Silver Street	250	132
St. Botolph's, Billingſgate	83	50	St. Mary-le-Bow's	64	36	St. Pancras, Soper Lane	30	15
Chriſt Church	653	467	St. Mary Bothaw's	55	30	St. Peter's, Cheap	61	35
St. Catherine's, Coleman Str.	299	213	St. Mary's Colechurch	17	6	St. Peter's, Cornhill	136	76
St. Catherine's Cree	335	201	St. Mary's Hill	94	64	St. Peter's, Paul's Wharf	114	86
St. Chriſtopher's	60	47	St. Mary's Mounthaw	56	37	St. Peter's Poor	79	47
St. Clement's, Eaſtcheap	38	20	St. Mary's Somerſet	342	262	St. Stephen's, Coleman Street	560	391
St. Diony's, Back Church	78	27	St. Mary's Staining	47	27	St. Stephen's, Walbrook	34	17
St. Dunſtan's in the Eaſt	265	150	St. Mary Woolchurch	65	33	St. Swithin's	93	56
St. Edmund's, Lombard Street	70	36	St. Mary Woolnoth	75	38	St. Thomas Apoſtle's	163	110
St. Ethelborough's	195	106	St. Martin's, Ironmonger Lane	21	11	Trinity Pariſh	115	79
St. Faith's	104	70						

Within the Walls, 97 Pariſhes, Total 15,207; of the Plague 9887.

	Funerals	Pla.		Funerals	Pla.		Funerals	Pla.
St. Andrew's, Holborn	3958	3103	St. Botolph's, Aldgate	4926	4051	St. Saviour's, Southwark	4235	3446
St. Bartholomew's the Great	493	344	St. Botolph's, Biſhopſgate	3464	2500	St. Sepulchre's	4509	2746
St. Bartholomew's the Leſs	193	139	St. Dunſtan's in the Weſt	958	665	St. Thomas's, Southwark	475	371
St. Bridget's	2111	1427	St. George's, Southwark	1613	1260	Trinity, Minories	168	123
Bridewel Precinct	230	179	St. Giles's, Cripplegate	8069	4838	At the Peſt Houſe	159	156
St. Botolph's, Alderſgate	997	755	St. Olave's, Southwark	4793	2785			

Without the Walls, 16 Pariſhes, Total 41,351; of the Plague 28,888.

	Funerals	Pla.		Funerals	Pla		Funerals	Pla.
St. Catherine's, Tower	956	601	Lambeth Pariſh	798	537	St. Mary's, Iſlington	696	593
St. Giles's in the Fields	4457	3216	St. Leonard's, Shoreditch	2669	1949	St. Mary's, Whitechappel	4766	3855
Hackney Pariſh	232	132	St. Magdalen's, Bermondſ.	1943	1363	Rotherhithe Pariſh	304	210
St. James's, Clerkenwell	1863	1377	St. Mary's, Newington	1272	1004	Stepney Pariſh	8598	6583

Extreme Parts of London and Weſtminſter, 12 Pariſhes, Total 28,554; of the Plague 21,420.

	Funerals	Pla.		Funerals	Pla.		Funerals	Pla.
St. Clement's Danes	1969	1319	St. Martin's in the Fields	4804	2883	St. Margaret's, Weſtminſter	4710	3742
St. Paul's, Covent Garden	408	261	St. Mary's, Savoy	303	198	At the Peſt Houſe	—	156

In the City and Liberties of Weſtminſter, then conſiſting of 5 Pariſhes only, Total 12,194; of the Plague 8403.

Funerals in the whole - - 97,306
Deaths by the Plague - - 68,596

Beſides Numbers who were privately buried, and no Account given by the Pariſh Clerks.

BOOK VIII.

Of the celebrated Spas, and Mineral and other Medicinal Waters in Great Britain, and other Parts of the World; of the Efficacy of Sea-bathing and Sea Water; and of medicated Baths and Fumigations.

CHAP. I.

Of Medicinal Waters in general.

IN the conſideration of the ſeveral matters propoſed to be the ſubjects of this Book, a freſh opportunity preſents itſelf, of admiring the conſummate wiſdom and infinite mercy of the Great Creator, in the wonderful diſpenſations of his providence, as it is extended to the race of man in this ſublunary world. In every quarter of the globe, to which human diſcovery has reached, natural medicines are to be found adapted to the particular diſorders to which the inhabitants of each clime are peculiarly liable; and the diſeaſe no ſooner makes it's appearance, than relief is at hand to remove it. Amidſt the humid air, the peſtilential vapours, the metallic effluvia of Peru, the *bark* of a plant which ſpontaneouſly covers the mountains, proves an infallible remedy for the ſlow fever, the putrid fever, and the ague. Where the venomous bite of the tremendous rattle-ſnake threatens death in all it's terrors, the *plantain* and *borehound*, in wild profuſion, offer a ſpeedy and effectual cure: in the frozen mountains of the northern world, the very *ſnow* is a ſovereign remedy for the froſt-bitten traveller; and in the torrid deſarts of Arabia, the air is impregnated with *ſpicy particles*, reſiſting the powers of putrefaction.

But among the natural productions which appear calculated to leſſen the pains, and alleviate the ſufferings which are incident to frail mortality, none ſeem to be of greater efficacy, or to be diſpenſed in a more liberal proportion, than ſalubrious *ſprings* and *medicinal waters*, which are known to abound in all the countries of the diſcovered world, and to vary ſo exceedingly in quality and operation, that they are applicable to almoſt every malady of ſlow progreſs to which the human body is liable.

On the virtues and efficacy of ſome of theſe waters, where they have been accidentally raiſed into reputation, elaborate treatiſes have been written; and critical directions have been offered by phyſicians, who have acquired fame and fortune in attending theſe fountains of health, for regulations of regimen and medicine, during the uſe of theſe ſalutary draughts; whilſt others, leſs celebrated, though probably equally efficacious, being from ſituation or other circumſtances leſs frequented by the great and affluent, and being conſequently of leſs importance to the faculty, are either left wholly unnoticed, or are mentioned with ſo ſlight a pen, as to convey no very high idea of the benefit which may be expected from them.

But, leſt this remark ſhould be thought to contain an inſinuation of partiality, or ſelf-intereſtedneſs, in a profeſſion highly and juſtly eſteemed for candour and liberality;

it becomes neceſſary to obſerve, that as experience is the only juſt ground on which approbation or diſapprobation can be pronounced, ſo the moſt determinate concluſions muſt of courſe be drawn from the effects of thoſe waters, which have been moſt frequently tried, under the immediate obſervation of the learned and ſkilful; and that it may be the miſfortune of mankind, but cannot reflect the leaſt blame on the phyſician, if the water of each individual ſpring does not receive it's due proportion of praiſe.

In the following chapters we propoſe to notice diſtinctly, and alphabetically, as to each country, the different medicinal ſprings in England and Wales, Scotland, Ireland, and the various other parts of the world, where their virtues have been celebrated by phyſicians, travellers, or naturaliſts.

C H A P. II.

Of the Medicinal Springs and Waters of England and Wales.

THE firſt medicinal water which occurs in our Alphabetical arrangement is,

ACTON, in Middleſex, about Six Miles from London.

The water of Acton-wells contains a purging ſalt, and a proportion of ſea ſalt; it is perfectly tranſparent, and free from ſmell, but is of a bitteriſh taſte reſembling a ſolution of Epſom ſalts. It's purgative quality is rather violent, occaſioning an excoriation of the gut at the extremity.

The ſeaſon for taking theſe waters, is in the months of May, June, and July.

AWFORD or ALFORD, in the South Part of the County of Somerſet.

This is a ſalt ſpring, and is ſaid to have been diſcovered in the year 1670, by the reſort of pigeons, who are known to be attracted by ſalt.

This water alſo contains a purging ſalt, and a mixture of ſea ſalt, and is of a very ſtrongly purgative quality.

It is ſaid to be of a cooling, cleanſing, and attenuating nature, and to be ſerviceable in obſtructions of the glands, ſcurvy, jaundice, and the like; and it's diuretic and perſpirative qualities recommend it as a remedy in the ſtone, gravel, and other diſorders which affect the bladder and kidnies, and for the relief of obſtructed perſpiration.

ALKERTON, near the City of Glouceſter,

Is a purging water, poſſeſſing nearly the ſame qualities as thoſe of Epſom, hereafter mentioned.

ASKERON, in Yorkſhire, a few Miles from Doncaſter.

This water is ſtrongly impregnated with ſulphur, with a ſlight tincture of purging ſalt.

It has been found uſeful in the king's evil, in leprous and ſcabby complaints, and in ulcers of various kinds; it's operations are both purgative and diuretic, and it has been adviſed in caſes where the bowels have been obſtructed from ſuppoſed foulneſs, and when worms have been ſuſpected.

ASTROP, near the Town of Banbury, in the County of Oxford.

This is a chalybeate water, of a lively, vinous, and not unpleaſant taſte; is directed to be taken in quantities to the amount of ſix or ſeven pints in the forenoon, for female obſtructions, hypochondriac complaints, and gravel or other urinary diſorders, operating as a very gentle purgative.

ASWARBY, near Grantham, Lincolnſhire.

This water is alſo chalybeate, and of a tranſparent blue caſt; it creates an appetite, is of great virtue in ſcorbutic and ſcrophulous complaints, and is alſo ſaid to be a remedy in the gravel; it operates as a mild laxative, neither occaſioning gripes or dejection of ſpirits, and is free from any mixture of ſea ſalt.

AYLSHAM, in Norfolk.

This is alſo a light chalybeate water, and is recommended to reſtore digeſtion, create an appetite, remove hypochondriac complaints, and generally to invigorate the animal ſyſtem.

BAGNIGGE Wells, near London.

The waters of theſe wells are of different kinds, the one purgative and the other chalybeate.

The former, when it is freſh from the pump, is remarkably limpid and clear, diſcharging more air-bubbles at the ſurface than moſt other waters at the ſpring head, though not in the like quantity as the chalybeate water which riſes on the ſame ſpot; it neither grows foul, drops a ſediment, or throws up a ſcum, when kept in a clean veſſel, unleſs heated beyond the natural warmth of any known climate.

It's taſte in the mouth is not diſagreeable, but it leaves a brackiſh bitterneſs on the palate.

Three half pint glaſſes of this water are ſufficient for a purge in moſt conſtitutions, without any addition of artificial ſalts, and it operates without producing gripings, faintneſs, or excoriation of the rectum; on the contrary, it is ſaid to relieve the laſt mentioned complaint, when it hath been brought on by violent cathartics.

It is ſaid to be efficacious in cleanſing the firſt paſſages, and in removing habitual coſtiveneſs, cholics, and the twiſting of the guts, taken warm at going to bed; and it is alſo recommended as a purge for perſons of hypochondriac and ſcorbutic habits, it's operation being mild, expeditious, and certain, without fermenting the humours, or agitating the blood. In ſmaller doſes it acts as an alterative, and has been adminiſtered with ſucceſs in ſcurbutic and ſcrophulous diſorders of long ſtanding.

It is alſo recommended to correct acidities and corrupt humours in the inteſtines, to prevent ſour belchings, and hard ſwellings of the ſtomach, to relieve the heart-burn, reſtore the decayed appetite and digeſtion, to ſtop retching and vomiting, and to relieve anxieties, palpitations, tremors, pains, ſwimmings, and giddineſs of the head.

It is preſcribed as a remedy for pimples, heats, and other eruptions in the face, and as a cure for worms, by ſcowering away the ſlimy viſcid humours which lodge and nouriſh theſe troubleſome gueſts in the inteſtines.

This water is directed to be taken in the quantity of two, three, or four glaſſes in a morning according to conſtitution, and to the effect produced; after this courſe has been purſued three or four days, it ſhould be diſcontinued two days, and then reſumed; and in this manner it may be followed as long as it is found beneficial and neceſſary: when it is uſed as an alterative, a glaſs or two will be ſufficient in a day, and in either caſe a liquid diluting breakfaſt of tea, water-gruel, or whey will be proper.

If the cold water diſagrees with the ſtomach, it may be warmed without leſſening it's purgative qualities; or thoſe who have weak ſtomachs may chew and ſwallow cardomoms, carraways, or other warm ſeeds. It is always adviſeable to uſe gentle exerciſe during a courſe of this water.

The chalybeate well is about forty yards from the purging well, and the water when firſt pumped up is exceedingly clear, and nearly of the complexion of the pureſt rain water; as it iſſues from the pump the ſmell of it is ſomewhat ſulphureous, and great numbers of air bubbles are diſcharged at the ſurface; the taſte is highly mineral, with a briſk and agreeable ſubacid tartneſs.

Being ſuffered to ſtand expoſed to the air, it will aſſume a whey-like appearance in an hour or leſs, and loſe it's clearneſs; but this change takes place ſooner or later according to the warmth of the weather. After a day or two a ſediment reſembling ochre begins to drop, and if the veſſel is an open one, and remains undiſturbed, a ſhining ſcaly duſt covers the ſurface of the water which ſinks to the bottom if the veſſel is moved, and riſes no more.

The mineral virtue of this water is retained to an amazing degree in all ſeaſons and climates; and if it is put into clean bottles, well corked and waxed, may be carried to the moſt diſtant part of the globe, without ſuffering any diminution of it's qualities.

To perſons who are not uſed to this water, it communicates a kind of giddineſs and raiſes an extraordinary flow of ſpirits, but this is apt to terminate in a propenſity to ſleep, which requires to be carried off by exerciſe. Upon the firſt taking of this water, it frequently acts as a purgative; but this effect only continues whilſt it is cleaning away thoſe vitiated contents of the firſt paſſages, which produce ſour belchings, diſtention, and hardneſſes of the ſtomach.

It is ſaid to correct acidities and acrimonious and bilious humours, to check violent fermentations of the blood, and to exhilerate and raiſe the ſpirits beyond moſt other medicines.

In glandular obſtructions and ſcrophulous diſorders in young people it is highly recommended; and it has a reputation for ſtrengthening the appetite and aſſiſting digeſtion.

It hath alſo been adviſed in hypochondriac, hyſteric, and nervous complaints, being ſo mild as ſeldom to diſagree with thoſe delicate conſtitutions which cannot endure any of the preparations of ſteel.

The catalogue of diſeaſes for which theſe waters have been preſcribed, will hardly come within the compaſs of our preſent undertaking; to thoſe we have already named, may be added, beginning conſumptions, diſorders of the inteſtines, ſpleen, and liver; violent evacuations, either of the female diſcharges, or dyſenteries; diabetes, ulcers in the kidnies, gravel, ſtone, jaundices, waſtings of the fleſh, relaxations, nervous debilities, irregular gouts, and ſcorbutic rheumatiſms.

In the adminiſtration of the chalybeate waters of the Bagnigge well, the following rules are directed to be obſerved:

In full and ſanguine conſtitutions, and particularly in a ſupreſſion of the menſes, to bleed moderately before the waters are given; and if the ſtomach and inteſtines are clogged, an emetic is adviſed in the evening, three glaſſes of the purging water on the following morning, and on the ſucceeding day a ſingle glaſs of the chalybeate, which may be increaſed by degrees to three, four, or even five glaſſes, if it ſits well on the ſtomach, and paſſes eaſily off by ſtool or urine; when this courſe has been continued a proper time, it ſhould be concluded with a doſe or two of the purging water.

Between each glaſs gentle exerciſe ſhould be uſed, but by no means to ſuch a degree as to raiſe a ſweat; and during the whole courſe, regard ſhould be had to the diet, which ſhould neither be crude or windy.

In coſtive habits, in ſcrophulous, ſcorbutic, and rheumatic complaints, and in the ſtone and gravel, the purging and chalybeate waters may be mixed, or each drank on alternate days; and if the chalybeate ſhould at firſt diſagree with the ſtomach, it may be reconciled to it by chewing a few carraway ſeeds, or dropping into each glaſs of the water a ſmall quantity of the tincture of cardamoms.

BANDWELL, or BALL, in Lincolnſhire.

The water of this ſpring is limpid, cold, and ſweet taſted, poſſeſſes a petrifying quality, and is ſaid to cure looſeneſſes and bleedings; and applied externally, to reſtore weakened joints: four or five half pints are preſcribed as a doſe.

BARNET and North Hall.

The waters of theſe ſprings, though ſeveral miles diſtant from each other, the former riſing at Eaſt Barnet, and the latter near High Barnet, Hertfordſhire, poſſeſs ſimilar qualities, both being ſlightly purgative.

BARROWDALE, near Keſwick, in the County of Cumberland.

This is a ſalt ſpring, the water reſembling in taſte and effect ſea water, though it's operations are rather more violent.

A pint of this water generally purges briſkly, and even this ſmall quantity is apt to occaſion thirſt and a diſagreeable heat; taken in ſmaller portions, it acts as an alterative, operating by urine, and for this purpoſe a large wine-glaſsfull is a proper doſe.

It is recommended to be uſed internally and externally, in all caſes where the ſea water is adviſeable; it is ſaid to have been applied with ſucceſs in the ſcurvy, leproſy, and king's-evil, in glandular obſtructions, and in diſorders of the ſkin.

BATH.

There are ſeveral baths in this city, of which the king's bath, the queen's bath, and the croſs bath are the principal, which may be ſuppoſed to be ſupplied from diſtinct ſprings, as they differ conſiderably in the degrees of warmth; but this cannot be poſitively determined, the waters of all poſſeſſing nearly the ſame qualities.

To nice obſervers this water has a ſulphureous ſmell, which is moſt perceiveable when the baths are filling; it's taſte is very ſlightly bitteriſh and ſaline, ſomewhat tinctured with a chalybeate, which, however, is by no means predominant; it appears of a ſea-green colour in the baths, but in a glaſs is perfectly tranſparent, and without colour, ſparkling like the Pyrmont water.

It contains either a quantity of fixed air, or ſome volatile acid, ſufficient to curdle milk, or even to diſſolve iron, as it is drawn from the pump.

The chief operations of the Bath water, are by urine and inſenſible perſpiration: on firſt uſing it, the patient is apt to complain of a drowſineſs and weight in the head, but theſe effects ſoon diſappear; taken in ſmall quantities, it produces coſtiveneſs, but this may be corrected by increaſing the doſe, when it will rather act as a purgative.

A courſe of theſe waters is recommended to be preceded by a regimen as to diet, gentle opening medicines, and in caſe of full and ſanguine habits, bleeding, as they are rather of a heating nature. The ſeaſons are, the months of April, May, and June, Auguſt, September, and October; and a courſe ſhould continue five or ſix weeks.

They may be taken in quantities from one pint to two quarts in a day, beginning with ſmall doſes, and increaſing as they ſit on the ſtomach and agree with the conſtitution; in whatever quantities however they are adminiſtered, the doſe for the day ſhould be divided into three unequal parts; the largeſt to be ſwallowed before breakfaſt, the next in quantity before dinner, and the ſmalleſt before ſupper, and at leaſt an hour before each meal; immediately after taking the water, the patient ſhould uſe moderate exerciſe; and, during the whole courſe, regard muſt be had to regimen in diet, hours, and, above all, to keep the mind in as tranquil a ſtate as poſſible.

Uſed internally, theſe waters are ſaid to brace up and ſtimulate the nerves and fibres, augment their electricity, and invigorate the whole human ſyſtem; to correct acrimonious putridity, and to ſtrengthen and increaſe the tone of the bowels and ſtomach; mingling with the circulation, they are reputed to promote it, and increaſing the action of the muſcles on the veſſels to enter the ſmalleſt of theſe diſtributors of the animal fluids, and removing all obſtructions, to accelerate the paſſage through the pores of ſuch parts of theſe fluids as have become corrupt, and are neceſſary to be expelled from the general maſs.

They are highly eſteemed as remedies in all thoſe diſorders of the bowels and ſtomach which proceed from relaxation, weakneſs, or a tendency to putridity in the humours; in hyſteric and hypochondriac complaints; in caſes of indigeſtion, windy cholic, and laſting pains in the ſtomach; in the removal of female obſtructions, occaſioning a ſtoppage of the natural diſcharges in barrenneſs; the *fluor albus*, or whites; in nervous diſorders, and thoſe in particular which affect the head, ſuch as convulſions, epilepſies, and paralytic ſeizures of all kinds; in obſtructions of the liver, ſpleen and other inteſtinal parts; in eruptive diſorders, leproſy, ſcurvy, and even that ſpecies of the laſt-mentioned diſeaſe which has been acquired at ſea; in flying gouts, and unſettled rheumatic complaints, in the gravel and ſtone.

Great relief has been obtained from the Bath waters in thoſe biliary concretions, which are commonly called gall-ſtones; but in theſe caſes the uſe of them muſt be accompanied with the Caſtile ſoap, and now and then a gentle cleanſing purge of rhubarb, or the like.

It may, however, be neceſſary to mention certain caſes, in which phyſicians have concurred to forbid the internal uſe of the Bath waters; theſe are, inflammatory rheumatiſms, inflammations on the lungs, and particularly if they tend to ſuppuration; in paroxiſms of the gout, and generally in all caſes, where the too ſtrong action of the fibres threatens inflammation, where the blood is too viſcid, and the animal heat already too violent.

Nor are the virtues and effects of theſe waters confined to the internal uſe of them. They are applied with equal advantage externally, and that too in paralytic complaints, contrary to the opinion of ſome eminent writers; they are alſo peculiarly ſerviceable in ſtiffneſſes, ſprains and relaxations of the joints, and in other diſorders of the limbs, occaſioned by obſtructions; in old ſores, ſcurvy and diſeaſes of the ſkin, and in reſtoring ſtrength and pliability to the limbs and joints, after long and weakening fits of the gout and rheumatiſm.

Where particular parts of the body are affected, pumping on the diſeaſed limb is to be preferred to general bathing; and the ſcum of theſe waters hath been ſucceſsfully employed in making poultices of proper herbs, to be applied to weakened joints, hard ſwellings, old ulcers and other partial indiſpoſitions.

It is in moſt caſes proper to join the internal to the external uſe of theſe waters: if the former ſhould occaſion a roughneſs and eryſipelatous redneſs on the ſkin ſoon after taking them, no danger need be apprehended, as it will diſappear after the courſe has been ſome time continued.

BILTON, in Yorkſhire, near Knareſborough.

The water of this ſpring is remarkable for it's peculiar coldneſs; it emits a ſtrong ſmell of ſulphur, and is ſomewhat ſalt to the taſte; it's operation is mildly purgative.

BINLEY, in Warwickſhire, near the city of Coventry.

This water, which is chalybeate, acts by purge and urine, but does not poſſeſs the former quality in any great degree.

Birmingham, in the ſame County of Warwick,

Is alſo a chalybeate water, of rather a more lively quality than that of Binley, but nearly reſembling it.

Brentwood, in Eſſex,

Is a mineral purging water, of nearly the ſame qualities as that of other ſprings of the like deſcription.

Bristol Hotwells.

This ſpring riſes on the bank of the river Avon, about a mile below Briſtol, between high and low water mark, and it's medicinal virtues are ſaid to have been originally diſcovered by ſome ſeamen, who, frequenting this place, found the water ſerviceable in curing the itch, and healing old ulcers and ſores, tho' it was not noticed till the beginning of the laſt century, nor did it arrive to any great degree of reputation, till towards the end of it, when the magiſtrates of Briſtol thought it worth their care, and endeavoured to ſecure it from the tide by a high wall round the ſpring; and various improvements have been ſince made to add to this ſecurity, though they have not proved wholly effectual.

The Briſtol water in a glaſs appears to the naked eye tranſparent, colourleſs and manifeſtly impregnated with air, ſparkling and bounding through it's ſubſtance in the form of little bubbles, ſo that the whole ſeems to be in a ferment; and this air, or elaſtic matter, appears to be the cauſe of the inteſtine motion of the fluid, and of the facility with which the globules roll over each other, and to the ſame cauſe we may attribute the property of this water to keep any length of time without putrifying.

This water is without ſmell, peculiarly ſoft, pleaſant and agreeable to the taſte, and to the touch barely lukewarm.

It will bear carriage, nor does it acquire any foulneſs or ill ſmell by keeping, though it loſes a portion of the elaſtic air in bottling, and before the bottles can be corked.

The method commonly recommended for taking theſe waters, is to begin with a a ſingle glaſs before breakfaſt, and another in the middle of the afternoon between dinner and ſupper, adding another glaſs in each interval, at the diſtance of a quarter of an hour, the ſecond day, and a thirdon glaſſ the third day; and this, allowing for variation of conſtitution, and circumſtances, may continue to be the courſe.

For common drink at meals, it ſhould ſtand uncorked a few hours after it is brought from the well, or the bottle uncorked may be ſet in a veſſel of warm water; it is uſually mingled with wine, but is much better unmixed.

Little preparation is neceſſary to the drinking theſe waters; yet the following directions may be of uſe:

The paſſions ſhould be kept as much as poſſible within bounds; exceſſes and violence inflame and irritate the blood, prevent digeſtion, and deſtroy the effects of the waters.

To the ſanguine, the florid, and thoſe of groſſer habits, ſome preparatory evacuations may be ſerviceable; the thin, pale, enervated, and phlegmatic patient will be rather injured by any.

Where the guts are clogged with a groſs glutinous phlegm, gentle purgatives are neceſſary; and in ſuch caſes, no medicine can be uſed with better effect than the magneſia alba, which may be adminiſtered with ſafety, at all times and ſeaſons, and in any quantities.

Emetics ſhould only be admitted as preparations for the Briſtol waters, when there is not the ſmalleſt apprehenſion of diſorder in the inteſtines: ſhould any of the internal parts be affected, the adminiſtration of vomits may be attended with great danger.

In inflammatory fixed pains, or in caſes of giddineſs or foulneſs, brought on by the uſe of the waters, bleeding may be proper; but it is ſeldom or ever neceſſary as a preparative.

Gentle exerciſe, particularly on horſeback,

back, tends greatly to facilitate the operation of theſe waters; and the ſea air taken on the downs, in the neighbourhood of the wells, refreſhes and ſtrengthens the lungs, and particularly of thoſe who are unaccuſtomed to breathe it; but exerciſe ſhould by no means be extended to fatigue, nor ſhould thoſe who wiſh to have the waters operate by urine, ride on horſeback; ſuch patients require but little motion, and what they are obliged to take ſhould be in walking.

In all diſorders of the lungs, proceeding from neglected colds, fevers, and inflammations, or from any other cauſe, and in every ſtage of theſe complaints, the Brſtol waters are held to be highly efficacious.

In conſumptions, they have been uſed with aſtoniſhing ſucceſs, and more eſpecially in the early ſtages of theſe diſeaſes; perhaps, if they were applied to in ſeaſon, which, however, is unfortunately ſeldom the caſe, they might be found to be almoſt infallible: it is unneceſſary to add, that in theſe diſorders a regimen is requiſite with regard to diet, and that ſome gentle medicines may promote the efficacy of the waters.

In internal hæmorrhages of all kinds, whether the blood paſſes by urine or ſtool, in the piles, or by an immoderate diſcharge of the menſes, theſe waters afford certain relief.

They are recommended to check old diarrhæas and dyſenteries, the *fluor albus*, or whites, obſtinate gleets, the diabetes, and other diſorders occaſioned by too great an increaſe of the ſecretions, or by the thinneſs of the humours; they are alſo ſaid to reſtrain waſting ſweats, and to reſtore ſtrength to thoſe who have been weakened by them.

In the gravel and ſtone they have proved highly beneficial; and have been taken to great advantage in the ſcurvy, in colical complaints, and in habitual gout and rheumatiſm.

Indigeſtion, and loſs of appetite, are ſaid to be relieved by the uſe of the Briſtol waters; and they are adviſed to be uſed externally in waſhing old ſores and ulcers, whether of a ſcrophulous or cancerous nature, and as a collyrium in caſe of inflamed eyes, and in particular where the eyelids are tender or excoriated.

Bromley, Kent.

This water is a chalybeate, of nearly the ſame qualities, though in a leſs degree, as the Pyrmont water.

Broughton, near Coln, Lancaſhire.

The water of this ſpring is ſtrongly impregnated with ſulphur, and turns ſilver or copper black; it alſo contains a proportion of ſea ſalt and purging ſalt.

It is recommended to be uſed internally and externally, in ſcrophulous and ſcorbutic caſes; and in the latter way, for old weakneſſes occaſioned by palſy, ſtrains, or the like.

Drank in large quantities, to the amount of a quart or two at a time, it acts as a purgative; taken more ſparingly, it operates as an alterative, and has been adviſed in diſorders ariſing from obſtructions.

Bugleton, or **Buglawton**, Cheſhire,

Is a ſulphureous water, intenſely cold, and reſembling in virtues and operation the Aſkeron water, before deſcribed.

Burlington, Yorkſhire.

This water is a lively chalybeate, but a leſs active purgative than ſome other Engliſh waters of the ſame properties.

Burnley, Lancaſhire,

Differs little from the Burlington water.

Buxton, Derbyſhire.

Theſe waters, which have long enjoyed a conſiderable degree of reputation, are of a moderate warmth, ſomewhat hotter than the Briſtol waters; but not reaching to the ſame degree of heat as thoſe of Bath.

They are clear and tranſparent, and perfectly inoffenſive to the taſte, containing neither ſteel, ſulphur, or any kind of acidity in their compoſition; but having a ſmall quantity of ſea ſalt, and a ſtill ſmaller portion of purging ſalt.

The Buxton waters are recommended in bilious colics, in habitual vomitings, occaſioned by too great irritability of the ſtomach, in the heartburn, loſs of appetite and indigeſtion, and in almoſt every diſorder of the inteſtines.

They are alſo ſaid to be ſerviceable in caſes of internal bleeding; in the *fluor albus* or whites; in paralytic diſorders, convulſions, and cramps; in aſthmatic complaints, and as a remedy for barrenneſs and waſting of the fleſh.

They have been alſo uſed internally for inflammations of the kidnies and liver, and in conſumptive caſes, where the lungs are affected; and they have been applied externally to old ſtrains, and hard tumours of the joints; in aches ariſing from gout or rheumatiſm, in contractions of the limbs, in the ſcurvy, and in eruptive complaints, ſuch as ſcabs, blotches, ring-worms, and the like.

The ſeaſon for drinking the Buxton waters is uſually from the beginning of May to the latter end of October, though they may be ſafely uſed through the winter, if the ſituation of the patient requires a longer perſeverance than the ordinary ſeaſon.

CARGYRLE, near Cheſter.

The water of this ſpring reſembles that of Barrowdale, but it does not poſſeſs ſo ſtrong a purgative quality.

CARLTON, near Newark, Nottinghamſhire.

This is a chalybeate water, of common deſcription; only that it has a very diſagreeable ſmell, like the drain of a dunghill.

CAWLEY, Derbyſhire.

This water is nearly like that of [the Aſkeron ſpring, being impregnated with ſulphur, and ſlightly purgative.

CAWTHORP, near Bourne, Lincolnſhire,

Is a chalybeate, impregnated with ſea ſalt, which is obvious to the taſte: it is ſaid to correct acidities, and is moderately purgative.

CHADLINGTON, Oxfordſhire, near Chipping Norton.

This water ſmells ſtrongly of ſulphur, and is ſalt to the taſte; it purges gently, and is uſed in diſeaſes of the ſkin, and in old ulcers and ſores.

CHELTENHAM, Glouceſterſhire.

The water of this ſpring hath been long in high reputation, for reſtoring loſt appetites, preventing indigeſtions, and ſtrengthening the tones of the ſtomach and bowels; it is alſo recommended in the ſcurvy and gravel.

It is a chalybeate, and operates by purging, without griping or other uneaſy ſenſations; the doſe from one half pint to five or ſix, according to conſtitution, habit, and other circumſtances.

CHIPPENHAM, Wiltſhire.

This is alſo a chalybeate water, poſſeſſing the ordinary qualities.

CLIFTON, near Deddington, Oxfordſhire.

This water is tranſparent and taſteleſs; and operates chiefly by urine, though it is alſo ſomewhat purgative; it is recommended in diſorders of the ſkin.

COBHAM, Surry.

This is a ſtrong chalybeate water, of the uſual quality.

CODSALWOOD, near Wolverhampton, Staffordſhire.

The water of this ſpring is ſtrongly impregnated with ſulphur, and is of the ſame nature as the ſeveral ſulphureous waters already deſcribed.

Colchester, Eſſex.

A purging mineral water, reſembling that of Epſom.

Colurian, Cornwall, in the pariſh of Ludgvan.

This ſeems to be a common chalybeate water.

Cumner, near Oxford.

A mineral purging water, ſomewhat diſcoloured and chalky, and muſt be taken in conſiderable quantities, to produce any ſenſible operation.

Coventry.

This water is chalybeate, and purges lightly, creating an appetite, and giving an unuſual flow of ſpirits.

Crickle Spa, near Broughton, Lancaſhire.

A purgative water, ſtrongly impregnated with ſulphur, but having a portion of ſea ſalt: it's virtues are the ſame with other waters of the like kind, which have been already deſcribed.

Croft, near Durham.

The water of this ſpring nearly reſembles that of Crickle ſpa, but is ſomewhat leſs purgative.

Cunley House, Lancaſhire.

This may be comprized in the ſame deſcription as the laſt-mentioned.

Derby.

A ſtrong chalybeate water, reſembling that of Tunbridge.

Dog and Duck, in St. George's Fields, Surry.

This is a mineral water, tranſparent and nearly taſteleſs; it purges mildly, but a large quantity is required to produce any effect, and it is therefore uſually quickened with purging ſalts when it is meant to operate freely. As an alterative it is recommended in complaints of the ſkin, in the ſcurvy, and ſcrophulous diſorders; it is likewiſe ſaid to be a remedy for cancers, and in theſe caſes may alſo be uſed externally.

It acts as a diuretic, but is too cooling and relaxing for perſons of weak and debilitated conſtitutions.

Dortshill, near Litchfield, Staffordſhire.

Here are two waters at this place of different natures and qualities, the one ſalt and purgative, bearing a weak reſemblance to the Barrowdale water; the other is a lively chalybeate.

Drigwell, Cumberland.

A ſmart chalybeate of a vinous taſte, and ſulphurous ſmell, not unlike the Deddington water, and poſſeſſing nearly the ſame virtues.

Dropping Well, Knareſborough, Yorkſhire.

The water of this celebrated ſpring is perfectly well taſted, tranſparent, and intenſely cold, and poſſeſſes petrifying qualities.

It is preſcribed as a remedy for internal hæmorrhages and fluxes, and externally for weakneſſes in the joints and limbs.

The doſe of this water is from one pint to two, at different draughts in a day, and it is adviſeable to take a doſe or two of mild purging phyſic, previous to a courſe of it.

Dulwich, on Dulwich Common, Surry.

This water was ſome years ago much celebrated, though it has not lately been in great repute, being rather out of faſhion.

It contains a certain portion of purging ſalt, and a ſmaller quantity of ſea ſalt, is tranſparent in a glaſs, brackiſh to the taſte, and ſomewhat bitter, though the latter is more perceivible on the palate after the water has been ſwallowed.

It has been recommended in various diſorders, and in particular in thoſe diſorders of the inteſtines which are occaſioned by obſtructions.

The nervous ſyſtem is ſaid to be ſtrengthened by the uſe of this water, and it is adviſed in the ſcurvy, jaundice, and green ſickneſs; as alſo in the gravel, and difficulty, or ſuppreſſion of urine.

The courſe of drinking this water is, to commence with a ſmall quantity, to increaſe it daily for a fortnight, till the amount is three or four quarts a day, and then to leſſen it gradually in the ſame manner.

DURHAM, near the city of Durham, on the North ſide of the river Wear.

This water is ſlightly impregnated with ſea ſalt, and ſtrongly with ſulphur, and it's waters uſed intetnally are cleanſing and purgative; and externally, ſtrengthening.

Near the laſt-mentioned ſpring is another, the waters of which are more ſalt, and more ſtrongly purgative.

EPSOM, Surry.

This water has alſo formerly enjoyed a higher degree of reputation than at preſent, it is perfectly tranſparent, without ſmell when it is freſh, and ſomewhat brackiſh to the taſte; if it is kept for any conſiderable length of time, it grows putrid, and the taſte becomes more ſalt and diſagreeable.

Taken in the quantity of a quart or three pints it is purgative, in ſmaller doſes it acts as an alterative, and in either caſe is ſaid to be uſeful in the ſame diſorders for which the Cheltenham waters are preſcribed. It may be uſed externally as a lotion for ſores, ulcers, and ſcabby eruptions on the ſkin.

FELTSTEAD.

This is a light chalybeate water, operates chiefly by urine, and is recommended in lowneſs of ſpirits, indigeſtions, and loſs of appetite.

FILAH, near Scarborough.

This water, which is a chalybeate, is more ſenſibly impregnated with ſalt than moſt others of the like kind. Several quarts of it are required to produce a purgative effect, it's principal operation being by urine.

GAINSBOROUGH, Lincolnſhire.

The water of this ſpring is a light chalybeate, weakly impregnated with ſulphur, and is uſeful in thoſe diſeaſes for which chalybeate waters are uſually preſcribed.

GLASTONBURY, Somerſetſhire.

The virtues of theſe waters were ſaid to have been miraculouſly diſcovered about thirty years ago; and they continued for ſome years in high eſteem; but have been lately much diſregarded.

Theſe waters are limpid without taſte or ſmell, whilſt they are freſh; but grow putrid if they are kept.

They have been principally recommended in ſcrophulous and ſcorbutic diſorders and in diſeaſes of the ſkin.

HAIGH, near Wigan, Lancaſhire.

This water is chiefly uſeful as a ſtyptic to ſtop internal bleedings: it is impregnated with green vitriol; and acts both as an emetic and purgative.

HAMSTEAD, Middleſex.

This water was formerly in high eſtimation, and it's virtues and efficacy have been celebrated in ſeveral elaborate treatiſes.

It is a chalybeate water of a perfectly tranſparent colour, though it tinges the veſſel in which it is ſuffered to ſtand, and the channel in which it runs off with an ochre caſt.

It's taſte is ſtrongly mineral, though not unpleaſant; and after it has been ſome time in bottles, it ſparkles like the Pyrmont water.

Three or four glaſſes of this water are a proper doſe, and ſhould be taken at ſmall intervals as early in the morning as poſſible, as ſome of the mineral particles are ſaid to be attracted and drawn off by the ſea.

It is recommended as ſerviceable in the removal of glandular obſtructions; in the ſcurvy, leproſy, gout, ſtone, and rheumatiſm; in eruptions of the ſkin; in the piles, gravel and ſtone; in nervous and hyſteric diſorders; in weakneſſes, whether acquired or conſtitutional; in all complaints of the ſtomach and bowels; and in a great number of chronic diſeaſes.

HANBRIDGE, Lancaſhire.

This is a chalybeate water, purgative in a very ſlight degree, and it is ſaid to have been ſerviceable in diſorders of the ſtomach, indigeſtion, nervous and hyſteric complaints.

HANLYS, Shropſhire, near Shrewſbury.

The two waters of this place are of different qualities; one a tranſparent purging water, ſomewhat ſalt and bitter to the taſte, ſparkling and riſing with great impetuoſity at the ſpring-head; nor does it ſuffer any alteration in colour or virtue by being expoſed to the air: the doſe of this water is from one pint to two, taken in three or four draughts.

The other water is a chalybeate, lively in appearance, and vinous to the taſte; drank at the fountain, it poſſeſſes the virtues of other chalybeate waters, but it loſes them by being kept.

HARROWGATE, Yorkſhire.

The waters, though they riſe from four different ſprings, are alike in quality; they contain a conſiderable portion of ſea ſalt, and a ſmall quantity of purging ſalt; are ſaline in taſte, and are ſo ſtrongly impregnated with ſulphur, as to make it very perceptible to the ſmell. They are tranſparent, and throw up a great number of air-bubbles at the ſurface.

When theſe waters are taken as purgatives, the doſe required will be from two pints to four; as an alterative, ſmaller quantities are ſufficient; and in this way they are recommended in ſcorbutic and ſcrophulous caſes, and in diſeaſes affecting the ſkin: they may be uſed externally in theſe caſes as a lotion or bath.

They are ſaid to be peculiarly ſerviceable in diſorders occaſioned by obſtructions; ſuch as the green ſickneſs, gout, and jaundice, and to be effectual in the deſtruction of worms.

Externally, they are applied to relieve old weakneſſes, either occaſioned by palſies and other diſorders, or by ſtrains and accidental injuries; and to remove eruptions on the ſkin.

HARTLEPOOL, Durham,

Is a chalybeate water, perfectly limpid, and agreeably taſted, but is ſo impregnated with ſulphur, as to be diſcoverable by the ſmell.

It acts by ſtool and urine, and is preſcribed for indigeſtion, and pains of the ſtomach; for bilious and nervous colics; for obſtructions of the female diſcharges; for hypochondriac and hyſteric complaints; for hectic heats, ſcurvy, and recent ulcers.

HOLT, Wiltſhire.

This water is tranſparent, and without any diſagreeable taſte or ſmell; it is purgative, but requires ſo large a quantity to be taken to produce any operation, that it is more frequently given as an alterative, in which way it is ſaid to reſtore the appetite, help digeſtion, and allay extraordinary heats.

Externally it is recommended in ſcorbutic, ſcrophulous, and cancerous caſes; and eſpecially where the bones are effected, to waſh the ſores or ulcers; it is alſo ſaid to be of uſe in the piles and in ſore eyes; but whenever it is uſed externally, an internal courſe of it muſt be purſued at the ſame time.

Jessops-well, Surry.

This water, though ſlightly chalybeate, is alſo ſtrongly purgative, and is very diſagreeable to the taſte.

For a purge, the doſe muſt be near a quart, more or leſs, according to conſtitution and other circumſtances; it operates pretty ſharply, but without griping or ſickneſs, and paſſes alſo by urine.

It raiſes the patient's ſpirits, and as the quantity required is comparatively ſmall, it is a pleaſant and eaſy purge.

Taken as an alterative, in ſmall quantities, it is ſaid to be highly beneficial in ſcorbutic caſes; but it ought to be uſed at the ſpring, as it does not retain it's virtues if it is kept.

Ilmington, Warwickſhire.

The water of this ſpring, which is chalybeate, abounds in fixed air, and is tranſparent and ſparkling like the Pyrmont water.

It does not commonly purge, but is ſaid to operate by urine to great advantage, in obſtructions of the inteſtines, in the early ſtages of dropſies and jaundices, in the gravel; and in caſes of obſtructed or ſuppreſſed urine; it is alſo recommended internally for the ſcurvy, and externally for eruptions occaſioned by that diſorder, and for old ulcers.

It muſt be perfectly well corked, to preſerve it's virtues any conſiderable time after it is drawn from the fountain.

Inglewhite, Lancaſhire.

This is a chalybeate water, ſtrongly impregnated with ſulphur, and is recommended as a remedy for the ſcurvy and other diſorders of the ſkin.

Islington, near London.

The water of this ſpring is a light chalybeate, acts principally by urine, and requires to be drank in pretty conſiderable quantities.

It is ſaid to be ſerviceable in hypochondriac, nervous, and hyſteric caſes, to help digeſtion, reſtore the appetite, brace up relaxed habits, and raiſe the ſpirits. It is alſo recommended in female weakneſſes, whether occaſioned by frequent miſcarriages, or the *fluor albus*; in obſtructions of the inteſtines, in the gravel, palſy, ſcurvy, and diſeaſes of the ſkin.

Kiddlestone, Derbyſhire.

This water though perfectly clear at the ſpring, turns black if it ſtands, and changes the colour of ſilver or copper, being very ſtrongly impregnated with ſulphur: it is abominably fœtid—and it's virtues and effects are ſimilar to thoſe of the Harrowgate water.

Kensington, Middleſex,

Is a purging water, reſembling that of Acton.

Kilburn, Middleſex.

This water is alſo purgative, in nearly the ſame degree as that of Bagnigge Wells.

Kynalton, Nottinghamſhire.

The water of this ſpring is clear and cool; it has a ſaline taſte, and a weak purgative quality.

Kingscliffe, Northamptonſhire.

This water is chalybeate, and ſlightly laxative.

Kirkby Thower, Weſtmorland.

Two ſprings riſe on nearly the ſame ſpot, the waters of which differ but little in quality, being both tranſparent, and having a chalybeate but not diſagreeable taſte. The lower ſpring is ſaid to be the ſtrongeſt; but even of this, ſeveral quarts are required to purge. It corrects acidities, and is a remedy for the heartburn.

Knowsley, Lancaſhire.

The water of this ſpring is a chalybeate, ſtrongly tinged with iron, which is perceptible both to the ſmell and taſte.

It is leſs purgative than the Cheltenham and ſome other waters of the ſame nature, requiring two quarts or more to produce this effect.

Sales Spa, Lancaſter.

This is alſo a chalybeate water, perfectly tranſparent, and leſs offenſive to the ſmell and taſte than the laſt-mentioned; if taken in conſiderable quantities, it acts by ſtool, urine, and vomit, and is recommended as an alterative in moſt chronic diſeaſes, except hectic and other internal fevers, inflammations or ulcerations.

Latham, Lancaſhire.

This water reſembles that of Sales Spa.

Llandrindod, Radnorſhire, South Wales.

This ſpot produces three different ſprings of mineral water, of various qualities. The firſt is called the pump water, is ſalt to the taſte, and operates by purge; it is preſcribed both internally and externally in ſcorbutic and ſcrophulous diſorders, and in ſcabby eruptions and other diſeaſes of the ſkin.

It is to be drank at the ſpring, by half-pint glaſſes at intervals, uſing exerciſe in the intermediate times, to promote it's operation; as ſoon as it begins to work, it will be right to diſcontinue drinking it.

As an alterative, it is adviſed to be taken in the quantity of two or three quarts in a day, according to circumſtances; and of whatever quantity is neceſſary, half may be taken before breakfaſt, in three draughts, at equal diſtances in an hour; and the other half muſt alſo be divided into three draughts, one to be taken between breakfaſt and dinner, at a proper diſtance from each meal, another between dinner and ſupper, and the third at bed-time.

The ſummer is the ſeaſon for drinking this water, and the patient muſt perſevere in the uſe of it many weeks, if he hopes to reap benefit from it.

In this way it is ſaid to be ſerviceable in hyſteric and hypochondriac diſorders, flatulencies, acidities, and indigeſtion.

The ſecond water of Llandrindod is ſtrongly impregnated with ſulphur, of which it ſmells very offenſively, and turns metals, and even the channel through which it runs off, black.

It is recommended not only in the ſame diſorders as the chalybeate water, but in hectic fevers, gouty and rheumatic caſes, gravel, bloody flux, and as a fomentation in weakneſſes of the joints, old ſtrains, and the like.

The quantity neceſſary for a doſe muſt be regulated by conſtitution, habit, age, and ſex; at any rate as much of it may be drank with ſafety as ſits eaſy on the ſtomach, and proves inoffenſive to it, but by no means more; and in order to enable the ſtomach to bear a ſufficient quantity to anſwer any good purpoſe, it will be prudent to commence the courſe with a very ſmall portion, and to increaſe it by degrees.

The third water, which iſſues from a rock, is ſlightly chalybeate, and perfectly tranſparent; both which qualities it loſes on being expoſed to the air, as well as that of fermenting with a mixture of ſugar and other acid.

It is ſaid to be efficacious in reſtoring relaxed habits, and weakneſſes of the nerves and muſcles; and is alſo adviſed in nervous fevers, obſtructions of the bowels, aſthmatic complaints, and the ſcurvy.

Llangibbi, Carnarvonſhire.

This water, which is in great reputation in the neighbourhood, is rough and ſomewhat bitter to the taſte.

It is given in paralytic, epileptic, and rheumatic caſes, and is ſaid to have afforded relief in many diſorders, which occaſion ulcers or eruptions.

Malton, Yorkſhire.

This water, which is ſtrongly a chalybeate, is ſalt to the taſte, and ſomewhat bitter.

It is ſaid to be ſerviceable in complaints of the ſtomach, and indigeſtion; in weakneſſes occaſioned by violent evacuations; and in ſome other chronic diſorders; operating as a purgative and diuretic, and if it meets a foul ſtomach, as an emetic. The doſe may be from one quart to three, according to habit and circumſtances.

Malvern Wells, Glouceſterſhire.

Theſe ſprings, which riſe at ſome diſtance from each other, are nearly of the ſame deſcription, being both chalybeate, light, agreeable to the taſte, and leſs impregnated with earthy particles than moſt other waters.

They are recommended in glandular complaints; in ſcorbutic, ſcrophulous, and cancerous diſorders; in diſeaſes of the ſkin, ſores, and ulcers; in obſtructions of the female diſcharges; in palſy, gout, gravel and ſtone; and in external inflammations, particularly of the eyes.

Contrary to all other baths, it is uſual here to bathe in the ſhirt or ſhift, and to leave it wet about the body, and ſuffer it to dry there; it being remarkable, that the waters of theſe ſprings, though free from ſalt, are no more apt to give colds than the ſea water. Linen cloths, kept conſtantly wet, muſt be applied to the diſeaſed parts.

But, previous to the external uſe of theſe waters, they ſhould be taken internally for ſome days, in ſuch quantities as the ſtomach will bear; as, in ſome caſes, they excite ſickneſs and purge, though they more commonly act by urine.

Markshill, Eſſex.

A chalybeate water, differing little in deſcription, operation, or virtues, from the ſprings of Hampſtead, Iſlington, and others of the ſame nature.

Matlock, Derbyſhire.

The waters of the ſeveral ſprings at this place are very ſlightly chalybeate, and occaſion petrifaction; in other reſpects, they are ſimilar to thoſe of Briſtol, being alſo of a moderate warmth: they are recommended in moſt caſes where the Briſtol waters are uſed.

Maudsley, Lancaſhire.

This water is ſtrongly impregnated both with ſulphur and ſea ſalt, has a blue caſt, an offenſive ſmell, and a diſagreeable ſaltiſh taſte.

It acts by purge, and is adviſed in ſcorbutic, ſcrophulous, and other chronic diſorders.

There is alſo another ſpring in the ſame neighbourhood, called the *Moſs-houſe* water; this is a chalybeate, reſembling in all reſpects that of Iſlington.

Moreton, Shropſhire.

This water operates well as a purge, and diuretic, and is of a cooling quality; it is ſaid to be excellent, uſed externally in ſcrophulous caſes, where the bones are affected.

Nevilholt, Leiceſterſhire.

This water is recommended as an antiputreſcent; it is perfectly tranſparent and void of ſmell when it is freſh from the fountain, but loſes it's clearneſs and becomes fœtid when it is expoſed for any conſiderable time to the air; it is ſomewhat rough and bitter to the taſte.

It acts by ſtool, urine, and perſpiration, but requires a pretty large doſe to produce the former effect.

It is recommended in all caſes of internal weakneſs and relaxation, diſcharges of blood and other old fluxes, gleets in both ſexes, dropſy, waſting of the fleſh, gravel, ſtone, relics of the gout and rheumatiſm, ſcurvy, and other chronic complaints; in acute and inflammatory diſeaſes it is ſaid to be rather hurtful.

NEWNHAM-REGIS, Warwickſhire.

Theſe waters, which riſe from three ſprings, are chalybeate, and alſo lightly impregnated with ſulphur; they act by ſtool and urine, and have been recommended in ſeveral chronic diſorders, particularly internal weakneſſes, whether occaſioned by exceſſes or diſeaſe.

NEWTONDALE, Yorkſhire, North Riding.

The water of this ſpring is perfectly cold, and poſſeſſes a ſtrong petrifying quality; it is ſaid to be efficacious in ſtopping bleedings, and aſſiſting internal weakneſſes; as a bath, it is recommended in contracted and ſtiffened joints, and other complaints of the like kind, of long ſtanding.

NORMANBY, near Pickering, Yorkſhire.

This water is impregnated with ſulphur, and offenſive to the ſmell; it's appearance is tranſparent and ſparkling, like the Pyrmont water; it acts as a mild purge taken in ſufficient quantity, and is preſcribed in ſcrophulous and ſcorbutic caſes, diſeaſes of the ſkin, and obſtructions.

NOTTINGTON, Dorſetſhire, near Weymouth.

This water turns ſilver of a bluiſh colour, containing a conſiderable quantity of ſulphur; it has a fœtid ſmell, and unpleaſant taſte.

It is ſaid to be efficacious in cleanſing the ſkin of eruptions, but ſhould for this purpoſe be drank in ſufficient quantities to purge.

ORSTON, near Thoroton, Nottinghamſhire.

The water of this ſpring, though it has a ſmell of ſulphur, and a taſte ſomewhat chalybeate, is notwithſtanding agreeable to the palate; it ſparkles in a glaſs like Champagne, and produces an effect ſomewhat ſimilar to large draughts of that wine, occaſioning a kind of temporary giddineſs; but it loſes this, as well as it's purgative quality, by being long expoſed to the air.

It is ſaid to be uſeful in diſorders of the ſtomach and bowels, obſtructions, gravel, and hectic heats.

OULTON, Norfolk.

A chalybeate water, reſembling thoſe in the neighbourhood of London.

PANCRAS, Middleſex.

The water of this well acts as a purge, and by urine; it contains a purging ſalt, and a ſmall mixture of ſea ſalt, yet is almoſt taſteleſs.

It is ſaid to be uſeful in the gravel and ſtone, in the ſcurvy, and to help digeſtion and reſtore the appetite.

QUEEN-CAMEL, Somerſetſhire.

This water contains chalk, ſea ſalt, and ſulphur; it's ſmell is offenſive, like that of gunpowder; it changes ſilver black or yellow, and communicates theſe colours to the channels through which it runs.

It has been preſcribed in ſcrophulous and ſcorbutic caſes, and in diſeaſes of the ſkin, and muſt be taken internally, at the ſame time it is uſed as a bath.

RICHMOND, Surry.

A purgative water, of nearly the ſame deſcription as that of Pancras.

Road, Wiltſhire.

The water of this ſpring is chalybeate, with a mixture of ſulphur perceptible to the ſmell; it muſt be drank at the ſpring, and is preſcribed for the ſame diſorders as the Queen-Camel water.

Rougham, Lancaſhire,

Is a weak ſalt water, uſeful in clearing the blood of acrimonious humours, and in ſcorbutic and ſcrophulous caſes: it requires a conſiderable quantity to purge briſkly.

St. Erasmus's Well, Staffordſhire.

This water is of the colour of fine ſmall beer, without ſmell, and not diſagreeably taſted; it purges ſmartly, if drank in large draughts, and it's virtues are nearly ſimilar to thoſe of the Rougham ſpring.

Scarborough.

Near this town are two ſprings, diſtinguiſhed by the ſeveral names of the *purging* and *chalybeate* wells; but they ſeem to differ more in degree of ſtrength than in the properties of the waters; they are both briſk, active, and pungent to the taſte, throwing up bubbles of air when they are poured out of a bottle into a glaſs, and both apparently abounding in fixed air.

They differ, however, ſomewhat in taſte, the purging water being rather bitter, the chalybeate a little vinous. Neither of theſe waters will bear expoſure to the air.

They have been recommended in general relaxations, and to reſtore the ſyſtem after too copious or exceſſive evacuations of any kind; in all diſorders of the ſtomach, ariſing from wind, indigeſtion, or acidity; in hypochondriac and hyſteric complaints; in nervous diſorders, obſtructions, aſthma, ſcurvy, and rheumatic pains; and they are ſaid to be excellent in allaying the heat of hectic fevers.

The *purging water* may be drank in half-pint glaſſes at ſmall intervals, till ſtools are procured, for which purpoſe from one quart to two is generally ſufficient. The chalybeate water is leſs purgative, operating principally by urine; both waters contribute to give the patient unuſual alacrity of ſpirit.

Send and Paulsholt Waters, in Wiltſhire.

Theſe ſprings riſe at a ſmall diſtance from each other, near the town of Devizes; they are chalybeates, acting by urine, and are preſcribed in the ſame caſes as the other waters of the like deſcription.

Stockport, Lancaſhire.

This is likewiſe a chalybeate, rather more ſtrongly impregnated with iron than the Tunbridge water.

Shadwell, Middleſex.

This water contains a greater quantity of green copperas or vitriol, than that of any other ſpring in Great Britain.

It is tranſparent, but hath rather a darkiſh caſt of colour, and is rough, aſtringent, and ſomewhat acid to the taſte.

It is given internally in diſcharges of blood, fluxes, the whites, and other gleets; in the ſcurvy, king's evil, and leproſy, and in jaundice and other diſorders occaſioned by obſtructions.

Externally, it is recommended in all diſorders which produce ſores, ulcers, or ſcabs, and may either be uſed as a lotion, or the parts affected may be dreſſed with linen rags dipped in it; but the application of the water in this way ſhould always be preceded by the internal uſe of it, which ſhould alſo be continued during the cure.

Shapmoor, Weſtmoreland.

This water contains a mixture of ſulphur and purging ſalt, and is recommended in chronic obſtructions, and in ſcorbutic and ſcrophulous caſes.

It is not altogether ſo ſtrong as the Aſkeron water, requiring a quart or three pints to purge.

Shettlewood, Derbyſhire.

This is nearly of the ſame deſcription as the laſt-mentioned.

Shipton, Yorkſhire,

Is alſo impregnated with ſulphur, and contains a portion of purging ſalt; and it's virtues are nearly the ſame as thoſe of the Shapmoor water.

Somersham, Huntingdonſhire.

This water riſes on the ſide of a ſmall hill, near the high road between St. Ives and Somerſham, about two miles and a half, or three miles from the former place.

It is a chalybeate, ſtrongly impregnated with the vitriol of iron and allum; is much ſtronger in dry than wet ſeaſons, and may be drank at the ſpring-head from the beginning of May to the beginning of October, though it will bear carriage to any diſtance; nor will it's virtues be impaired by keeping, provided it is bottled at a proper time, and well corked; but it ſhould be carefully decanted or ſtrained after keeping, as it will drop a ſediment.

It may be taken before breakfaſt, in the quantity of three large wine-glaſſes, each of which ſhould be warmed with a ſmall quantity of common ſpring water heated, and they ſhould be ſwallowed at the diſtance of half an hour between each draught, the patient in the intervals keeping in gentle motion, either on foot or on horſeback; ſitting ſtill, or reading, writing, or other ſedentary employment, immediately after taking this water, being apt to bring on a giddineſs, and to occaſion ſickneſs at the ſtomach; after each glaſs it will alſo be proper to eat a little preſerved orange-peel, or a few cardamom or carraway-ſeeds.

This water is alſo ſometimes directed to be taken mixed with an equal quantity of new and warm cow's or aſs's milk, or a whey made from it, by boiling equal portions of the water and milk till the curd ſeparates, which ſhould then be carefully taken away. This method of adminiſtering it is adviſeable in conſumptive caſes.

But in whatever way it is given, it will be neceſſary to purge the patient before the courſe is begun, and this may be done with ſuch medicines as are moſt ſuitable to the diſorder and conſtitution; in ordinary caſes a ſolution of half an ounce of Rochelle ſalts, in a glaſs of the chalybeate water, warmed as before directed, will be a proper purging doſe. It may be proper to obſerve, that this water is apt to change the colour of the ſtools, which generally become black.

It is recommended in debilities of the ſtomach and bowels; in dyſenteries; in putrid crudities of the ſtomach; in obſtructions of the liver and ſpleen; in the jaundice, when it affects grown people; in uterine complaints; ſchirrhous, cancers, hæmorrhages, obſtructions, the whites, and weakneſſes after miſcarriage; in the ſtone and gravel, the diabetes and diſorders in the bladder and urinary paſſages; in hypochondriac and hyſteric complaints; in the ſcurvy, and conſumptions from ſcorbutic habits; in rheumatic pains, and the remaining weakneſſes of the gout.

It may alſo be applied externally to foul ulcers and cancers.

But it is not adviſeable for perſons who are troubled with acidities in the ſtomach, which it rather tends to increaſe than correct; nor ſhould it be preſcribed to thoſe who are affected with vertigo, or giddineſs in the head, aſthmas, dropſies, or ſwelled legs; in obſtructions of the female diſcharges in full habits it is hurtful, nor ſhould it be taken in any caſe, without proper previous evacuation by purging.

A regimen as to diet is abſolutely neceſſary during a courſe of theſe waters; the food ſhould be light, plain, and eaſy of digeſtion.

STENFIELD, Lincolnſhire.

This is a tranſparent chalybeate purgative water, inoffenſive to the ſmell and taſte, ſomewhat ſpirituous and vinous when it is firſt drawn, but ſpoils on expoſure to the air for any conſiderable time.

It poſſeſſes nearly the ſame virtues as the Hartlepool water.

STREATHAM, Surry.

This water is gently purgative, rather ſalt and diſagreeable to the taſte; it is of a yellow caſt, and when ſuffered to ſtand, is covered with a ſcum ſhaded with blue, green, and yellow.

The doſe is from one quart to two, and it has been recommended in complaints of the eyes, and to promote urine.

STANGER, Cumberland.

The water of this ſpring, which riſes near Cockermouth, is a chalybeate, impregnated with vitriol and a mixture of ſea ſalt; it acts as a purgative and emetic; and when taken to any conſiderable quantity, it's operation is rather violent.

The virtues of this water are nearly the ſame as thoſe of Shadwell.

SUTTON-BOG, Oxfordſhire.

The water of this ſpring contains a mixture of alkaline and ſea ſalt, and being ſtrongly impregnated with ſulphur, is extremely offenſive to the ſmell; nor is the taſte of it, which is ſalt and acrid, leſs diſagreeable.

It changes the colour of ſilver, turning it black; and being ſuffered to ſtand, drops a black muddy ſediment, and a bluiſh ſcum covers the ſurface of it.

It acts gently as a purgative, and is uſed both internally and externally in ſcorbutic and ſcrophulous ulcers, and diſeaſes of the ſkin; in the external application of it, it ſhould be ſhook, ſo as to diſperſe abroad the ſediment, or the parts affected may be dreſſed with the mud itſelf.

SWANSEA, Glamorganſhire, South Wales.

This is one of thoſe vitriolic waters which are ſaid to ſtop internal hæmorrhages, and violent purgings; it may alſo be applied to ſtay external bleedings.

SYDENHAM, Kent.

This is a purgative mineral water, ſomewhat reſembling that of Epſom, but leſs powerful.

TARLETON, near Preſton, Lancaſhire.

The water of this ſpring is a purgative chalybeate, and is alſo lightly tinctured with ſulphur: from one quart to two will produce ſtools; and it is ſaid to be ſerviceable in ſcurvy, rheumatiſm, and aſthmas; in diſorders of the ſtomach, and general relaxation.

TEWKSBURY, Glouceſterſhire, and WALTON and TEDDINGTON in that neighbourhood.

The waters of theſe ſeveral ſprings reſemble in deſcription and effects the purging waters near London.

THETFORD, Norfolk,

Is a chalybeate, ſomewhat vinous to the taſte, and is preſcribed in diſorders of the bowels and ſtomach, in relaxations, lowneſs of ſpirits, and the firſt ſtage of conſumptions.

THOROTON, Nottinghamſhire.

A chalybeate purging water, ſaid to be uſeful in the ſcurvy, in bilious and nervous cholics; in diſorders of the ſtomach, and female obſtructions; in hectic fevers, and hypochondriac complaints.

THIRSK, Yorkſhire, North Riding.

This is alſo a chalybeate water, acting as a purge and diuretically; and it is ſaid to be uſeful in ſcorbutic and ſcrophulous caſes, and in diſeaſes of the ſkin.

Tibshelf, Derbyſhire.

This water is ſaid to reſemble the Pyrmont water in appearance and virtues.

Tilbury, Eſſex, near Tilbury Fort.

This water has long been in good reputation, which has rather increaſed of late.

It is ſomewhat rough on the tongue after being turned round the mouth, though ſwallowed as an immediate draught it is ſoft and pleaſant to the palate; it's colour is yellowiſh, and after it has ſtood ſome time, it appears covered with an oily ſcum, ſhaded with different colours.

A mixture of ſpirit of vitriol with this water, produces effervеſcence; it curdles with common ſoap, but mixes perfectly with milk; boiled alone, it aſſumes a milky appearance, but may be fined by a ſmall quantity of acid of any kind.

It is recommended to help digeſtion, excite an appetite, and ſtrengthen the ſtomach; and is ſaid to be efficacious in ſcorbutic and ſcrophulous diſorders, and in thoſe diſeaſes of the ſkin which are occaſioned by glandular obſtructions; it is alſo preſcribed in exceſſive evacuations, in acidities, and in diſorders ariſing from relaxation.

From a pint to a quart, according to circumſtances, may be taken in a day; in ſome caſes it purges, but in moſt acts as a diuretic, and is on that account thought uſeful in dropſies.

It is remarkable, that this water produces a ſenſation in the ſkin, like that of a benumbed limb when it approaches the fire, though in a leſs degree.

Tunbridge Wells, Kent.

The two ſmall medicinal ſprings, which are known by the name of Tunbridge Wells, riſe contiguous to each other, about five miles to the ſouthward of Tunbridge; they are ſituate in a valley, ſurrounded with rocks and cliffs, the only productions of which are furze and heath.

There is no perceptible difference in the ſtrength or quality of the waters of theſe ſprings, which are chalybeate, taſte ſtrongly though not diſagreeably of iron, and contain alſo a ſmall portion of ſea ſalt.

They are recommended as efficacious in the removal of obſtructions, ſuch as occaſion diſorder in the liver and ſpleen, agues, jaundice, dropſy, green ſickneſs, whites, obſtructed or exceſſive female diſcharges, colic, gravel, ſtone, ſuppreſſion of urine, and ulcers of the kidnies or bladder.

They are alſo preſcribed in dyſenteries or bloody fluxes, internal inflammations, pains in the ſtomach, and loſs of appetite; head-ache, giddineſs, convulſions, palſy, apoplexy, lethargy, and defluxions of rheum from the head: they are ſaid to ſtop hiccups and vomiting; to relieve nervous, hypochondriac, and hyſteric complaints; and to invigorate the animal ſyſtem, and raiſe the ſpirits; and are reputed to be particularly ſucceſsful in the deſtruction of worms.

Externally applied, they are ſaid to aſſiſt weak and ſore eyes, and to remove pimples and other eruptions from the ſkin.

The ſummer is the proper ſeaſon for drinking them, from the beginning of June till Michaelmas; they are held to be in the beſt condition when the weather is dry and clear.

The waters are adviſed to be drank at the wells, the exerciſe of going for that purpoſe, and returning, adding in no ſmall degree to the virtue of them, and the water itſelf being conſiderably injured by keeping.

Some phyſicians direct a ſmall quantity of common, or other purging ſalt, to be diſſolved in the firſt glaſs; and others recommend caraway or cardamom-ſeeds, or ſome ſpice or warm confection, to be taken after each glaſs, as this water is apt to occaſion ſickneſs at the ſtomach, and retching to vomit, eſpecially if the patient's ſtomach is foul.

The quantity required can only be aſcertained by circumſtances; the age, conſtitution, and complaints of the patient, muſt be conſulted, and more or leſs of the water adminiſtered, as may be found neceſſary; but the draughts ſhould not ſucceed each other too quickly, nor ſhould each conſiſt of more than a wine-glaſsful, which may be repeated at the diſtance of ten minutes or a quarter of an hour, and ſo till the whole doſe is ſwallowed, before breakfaſt.

Though moderate exerciſe will generally contribute to the ſucceſs of theſe waters, yet all violence is to be avoided; the gentle motion of a horſe ſeems moſt likely to anſwer every good end.

It is impoſſible to determine the length of time neceſſary to compleat a courſe of theſe waters; this alſo muſt depend on the ſituation of the patient, and the nature of his complaint: but it is always adviſeable to begin it with ſmall quantities, increaſing gradually for a certain time, and then decreaſing in the ſame way; and if the diſorder is not compleatly ſubdued, to begin a new courſe, and purſue it in the ſame manner.

Some preparation is adviſed to a courſe of theſe waters: in moſt caſes gentle purging is ſufficient, but in groſs and ſanguine habits other evacuations are required.

A regimen is alſo neceſſary; the food ſhould be light, and that part of it which conſiſts of animal fleſh, ſhould be of mutton, fowls, and game, rather than beef or pork; veal and lamb may alſo be allowed; the bread ſhould be pure and well baked, and the leſs wine is taken the better; exceſſes in eating or drinking will render the waters uſeleſs, nor ſhould the paſſions be diſturbed by violence of any kind.

UPMINSTER, Eſſex, near Brentwood.

The water of this ſpring is ſtrongly impregnated with ſulphur, and contains alſo a portion of purging ſalt.

It is recommended in obſtructions, worms, and foulneſs of the bowels, and in ſcorbutic, ſcrophulous, and leprous caſes.

WARDREW, Northumberland.

This water, which riſes on the banks of the river Arden, contains alſo ſea ſalt and ſulphur, is extremely cold, and may be found uſeful in the ſame caſes as the Upminſter ſpring: it is alſo preſcribed for old aches, ſtrains, and contractions.

WEATHERSTACK, Weſtmoreland.

A weakly purgative chalybeate water, containing a portion of ſea ſalt, and at certain ſeaſons of the year ſulphur; it's virtues are the ſame as ſeveral waters of the like deſcription already mentioned.

WELLENBOROUGH, Northamptonſhire.

This water is ſlightly chalybeate, reſembling the chalybeate waters round London.

WEST ASHTON, or STEEPLE ASHTON, Wiltſhire.

A water ſimilar to that laſt deſcribed.

WESTWOOD, Derbyſhire, near Tanderſley.

The water of this ſpring is a chalybeate, but impregnated with vitriol, and is principally uſed in external applications to old ulcers in the legs.

WHITE-ACRE, Lancaſhire.

This water is chalybeate, and is ſaid to poſſeſs rather an aſtringent than a purgative quality, and may therefore be uſeful in hæmorrhages, exceſſive diſcharges, and relaxations; it is a lively ſparkling water, and perfectly tranſparent.

WIGAN, Lancaſhire.

A chalybeate water, anſwering the deſcription of thoſe near London.

Wigglesworth, Yorkſhire, Weſt Riding.

This ſpring riſes about four miles from the town of Settle, in the pariſh of Long Preſton; the water is impregnated with ſulphur, and contains alſo a portion of ſea ſalt; it is of a blackiſh colour, and diſagreeable taſte.

It is ſaid to excite vomiting, taken in moderate quantities, and larger draughts of it purge; it is principally uſed to clear the ſtomach and bowels.

Witham, Eſſex.

This ſpring riſes about three quarters of a mile from the town of Witham, into a ſmall reſervoir, from whence it is brought up by a pump; it is certainly a chalybeate, though it wants that peculiar briſk and piquant taſte which diſtinguiſhes moſt of the waters of this claſs; when perfectly freſh, it it is agreeable to the palate and the ſtomach, but being ſuffered to ſtand, it becomes vapid, aſſumes a milky appearance, a variegated ſcum ariſes on the ſurface; and after ſome time depoſiting a browniſh ſediment, it loſes it's chalybeate taſte and properties.

It operates chiefly by urine, and is recommended in nervous, hypochondriac, and hyſteric diſorders; to promote digeſtion and reſtore the appetite; to check vomiting, and allay hectic heats; to relieve chronic colical pains, and to reſtore the ſyſtem, when it has been debilitated by diſeaſe or exceſſes.

It is alſo preſcribed for obſtructions, and diſorders ariſing from them, ſuch as jaundice, agues, and the firſt ſtages of the dropſy; and is ſaid to have afforded relief in the ſcurvy, aſthma, and gravel.

It muſt be drank at the ſpring (for it will not bear carriage) in ſuch quantities as the ſtomach will receive without nauſea.

Wirksworth, Derbyſhire.

This water is ſlightly chalybeate, and contains a mixture of purging ſalt and ſulphur; it is given in the ſcurvy, king's evil, and foulneſſes of the ſkin.

CHAP. III.

Of the Spas, Mineral and other Medicinal Waters of Scotland.

It is ſomewhat extraordinary, that in a country of ſuch extent, ſo mountainous in parts of it, and ſo various in ſoil, a very few medicinal waters only have been diſcovered, and brought into uſe and reputation; and as the ſtudy of medicine is cultivated to the higheſt degree of perfection in the univerſities of this kingdom, which have produced numbers of phyſicians, not only eminent in their practice, but diſtinguiſhed by the learning and elegance of their writings, and their zeal in reſearches after medical knowledge and information, we are inclined to believe, that this part of Great Britain is leſs ſupplied with waters of peculiar virtues, than the ſouthern parts of theſe united kingdoms.

The following, however, are thoſe which have been found moſt ſalubrious, and the efficacy of which has been determined by experience and inveſtigation.

CARSTARPHIN.

This ſpring riſes about two miles from Edinburgh, contains a ſmall portion of ſea ſalt, and is ſlightly impregnated with ſul phur. Here is alſo another ſpring nearer to the laſt-mentioned city, by the water of Leith.

Theſe waters, of which the latter is the ſtrongeſt, act ſometimes purgatively, but for the moſt part by urine.

They are generally adminiſtered as alteratives, in obſtructions, ſcrophulous and ſcorbutic caſes, and in diſeaſes of the ſkin.

DUNSE.

This water is a briſk and light chalybeate; it taſtes of the iron, and contains a ſmall portion of ſea ſalt.

It poſſeſſes nearly the ſame virtues of the ſpa waters of Germany, but in a much leſs eminent degree.

GLENDY.

The water of this ſpring, which riſes in the county of Mearns, is a ſtrong chalybeate, of the ſame nature as the Iſlington water, but much more powerful.

HARTFELL, Annandale,

Is a vitriolic water; and, like others of the ſame quality, it is preſcribed in different quantities, from a wine-glaſsful to a pint, according to circumſtances, in diſorders of the bowels and ſtomach, to ſtop internal bleedings, and other immoderate diſcharges of blood or by ſtool: it is alſo ſaid to be uſeful in gleets and other weakneſſes, and to have been adminiſtered with ſucceſs in early ſtages of conſumptions.

It is alſo recommended to waſh old ſores, and acrid eruptions on the ſkin; but this application of the water ſhould always be accompanied with the internal uſe of it.

KINCARDINE.

This ſpring alſo riſes in the county of Mearns, and is a chalybeate water, nearly reſembling that of Glendy.

MOFFAT, Annandale.

The two ſprings of this place differ only in the ſtrength of the waters; they are both impregnated with ſulphur, which renders them nauſeous to the taſte and offenſive to the ſmell; that which flows from the lower well is generally taken internally, the water of the upper ſpring is uſed for lotions, fomentations, and bathing.

It is preſcribed for the ſcurvy, king's evil, and diſorders of the ſkin; for habitual obſtructions; for the *fluor albus*, and other female weakneſſes which prevent conception; and for complaints in the ſtomach and bowels.

The quantity muſt be aſcertained by the circumſtances of the patient's conſtitution and the diſeaſe; in ordinary caſes, two or three quarts a day are directed to be taken before breakfaſt, in different draughts, and at proper intervals, ſo as not to offend the ſtomach.

But it is always right to cleanſe the firſt paſſages, previous to a courſe of theſe waters, by gentle purges, and even emetics, if required; and if the water, which generally acts diuretically, though it ſometimes purges, ſhould remain long in the body without paſſing off, it may be proper to diſſolve a ſmall quantity of purging ſalts now and then in a glaſs of it; and ſhould that prove ineffectual, moderate bleeding may be beneficial.

Warmed to the heat of milk, it is preſcribed as a lotion for waſhing old ſores and ulcers, ariſing either from ſcrophulous or ſcorbutic diſorders; and theſe wounds may either be dreſſed with linen rags dipped in the warm water, or, if practicable, the diſeaſed limb may be bathed in it. The ſteam of it, properly directed, has been of uſe in old contractions and ſtiffneſſes of the joints: it muſt be uſed internally as well as externally, in the laſt-mentioned caſes.

PETERHEAD.

This water is chalybeate, of the ſame nature as that of the Glendy ſpring, but much ſtronger; it is in high reputation.

CHAP. IV.

Of the Spas and Medicinal Waters of Ireland.

THIS kingdom is plentifully ſupplied with wells and ſprings of water, differing in quality, but each efficacious in removing or relieving the diſorders of the human body, as will appear from the following account of them.

Aghaloo, or Aphaloo.

This water is impregnated with the foſſil alkali, with ſulphur, and a ſmall quantity of purging ſalt, and is preſcribed for the ſcurvy, king's evil, and diſeaſes of the ſkin.

Anaduff, County of Leitrim.

The water of this ſpring is impregnated with ſulphur, and is much of the ſame kind with the laſt deſcribed, but weaker.

Ashwood, County of Fermanagh.

This ſpring alſo reſembles the above, containing the foſſil alkali, ſulphur, and a ſmall quantity of purging ſalt.

Athlone, County of Roſcommon.

This is a weak chalybeate water, devoid of colour, ſmell, or particular taſte; it operates gently by ſtool, but principally by urine; and is recommended in bilious colics, in other diſorders of the ſtomach and bowels, and to remove obſtructions.

Ballycastle, County of Antrim,

Is alſo a chalybeate water; it has an offenſive ſmell, but in other reſpects ſeems analogous to the waters of the ſame nature in the neighbourhood of London.

Ballynahinch, County of Down.

This is a tranſparent chalybeate water, cold, and impregnated with ſulphur; and is preſcribed in diſorders of the ſkin, ſcurvy, king's evil, want of appetite, and diſorders of the ſtomach.

Ballyspellan, near Kilkenny.

This water is alſo chalybeate, and reſembles in deſcription and virtues thoſe in the neighbourhood of London.

Carrickfergus, County of Antrim.

This water is weakly purgative, very ſoft to the taſte at the ſpring-head, and of a blue caſt in colour; the quantity of two or three quarts are required to produce any effect.

Carrickmore.

This ſpring riſes near Belturbet, in the county of Cavan, and the water has the ſoft milky taſte of Briſtol water, and will not bear keeping; it curdles with ſoap, and drops a white ſediment, on having a ſmall quantity of ſalt of tartar thrown into it. It contains an alkaline, and a portion of purging ſalt.

It is eſteemed for removing glandular obſtructions, and is recommended in diſorders of the ſtomach ariſing from acidities, in immoderate fluxes, and other relaxations.

Cashmore, County of Waterford,

Reſembles in virtues the Croſs Town water, hereafter deſcribed, though it is ſomewhat ſtronger.

Castle Connel, County of Limerick.

This water, which is chalybeate, is recommended in the ſame caſes in which the

German Spa waters are preſcribed; it is at preſent in good reputation.

Castlemaign, County of Kerry.

This is a ſtrong chalybeate water, impregnated alſo with ſulphur, and reſembles in virtue, that of the Aghaloo ſpring.

Coolauran, County of Fermanagh.

A chalybeate water, reſembling that of Iſlington and others in the neighbourhood of London.

Cross Town, near Waterford,

Is a vitriolic water, acting on ſome by purging, and on others emetically, but moſt commonly by urine.

It appears to contain a greater quantity of acid at ſome times than at others, and is recommended for internal bleedings, immoderate fluxes of all kinds, and in particular thoſe of blood, complaints of the bowels and ſtomach, and conſumptions: the doſe is from a wine-glaſsful to a quart, according to circumſtances. Externally uſed, it is ſaid to cleanſe the ſkin from ſores, tetters, and other eruptions, but it muſt be taken internally at the ſame time.

Derindaff, County of Cavan.

This water is impregnated with ſulphur and a purging ſalt.

It is given in ſcorbutic and ſcrophulous caſes; ſcabs, leproſy, and complaints of the like kind; it is alſo ſaid to be efficacious in the removal of chronic obſtructions, and the deſtruction of worms.

Derryhence, or **Derryinch**, County of Fermanagh.

This water contains ſulphur and the foſſil alkali, and poſſeſſes nearly the ſame virtues as the water of Aghaloo.

Derrylester, County of Cavan.

This water reſembles alſo the laſt-mentioned, but is ſtronger.

Drumasnave, or **Mount Campbell**, County of Leitrim.

The water of this ſpring changes metals more quickly than any other in Ireland, and muſt therefore contain the greateſt quantity of ſulphur.

It is perfectly tranſparent and colourleſs in common, but turns white on the approach of rain; it contains beſides ſulphur a portion of the foſſil alkali, and a ſmall quantity of purging ſalt: it's chief operation is by urine, though it purges ſome conſtitutions; and is ſaid to produce in others a very contrary effect. It is recommended in the ſcurvy and king's evil; for diſeaſes of the ſkin, and worms.

Drumgoon, County of Fermanagh.

This water is alſo ſtrongly impregnated with ſulphur, as is apparent from it's ſmell; it changes ſilver to a copper colour in a few minutes; a black ſediment or mud is found at the bottom of the well. Being nearly of the ſame deſcription and virtues as the Drumaſnave water, it is adviſed in the ſame caſes.

In this neighbourhood are alſo two other ſprings, the waters of both which contain ſulphur; one of them reſembles in moſt reſpects the Drumgoon water; the other acts more briſkly as a purge.

Dublin Salt Springs.

Theſe ſprings are ſix in number; five in Francis Street, and one in Thomas's Court.

The waters of all theſe ſprings are more or leſs ſalt, and poſſeſs nearly the virtues of ſea water; as a purge, the quantity of ſeveral pints will be required; they operate without griping, or other ſenſations of pain or uneaſineſs.

Galway.

This water is chalybeate, and reſembles that of Tunbridge, in England.

Glanmile, near Naul.

A chalybeate water, reſembling thoſe of the chalybeate ſprings near London.

Granshaw, near Dunnaghadee, County of Down.

This water is alſo chalybeate, and reſembles that of the Caſtle Connel ſpring.

Kanturk, County of Cork.

A chalybeate water, of the nature of thoſe in the neighbourhood of London.

Kilbrew, County of Meath.

This water is alſo chalybeate, but ſtrongly impregnated with vitriol, and reſembles in deſcription and virtues that of Croſs Town, already mentioned; but as it is much ſtronger, great caution is neceſſary in the uſe of it, and it is always adviſeable to begin with a ſmall quantity, and increaſe the doſe by degrees.

Kilroot, County of Antrim.

This is a weak ſalt water, reſembling ſea water; a large quantity of it is required for a purge.

Killingshanvally, County of Fermanagh,

Is a chalybeate water, acting as a purge and diuretically; it is recommended in ſcrophulous and ſcorbutic caſes, eruptions on the ſkin, and obſtructions.

Killasher, County of Fermanagh.

This water is ſtrongly impregnated with ſulphur, and poſſeſſes nearly the virtues of the Aghaloo water.

Lisbeak, in the ſame Pariſh with the Killaſher Spring.

At this place are two ſprings, both highly ſulphureous, and poſſeſſing the virtues of the waters laſt deſcribed.

Lisdonevarna, County of Clare.

This water is manifeſtly chalybeate, both to the taſte and ſmell; it alſo contains a portion of the foſſil alkali; it's virtue may be preſerved, if it is carefully bottled and well corked: it's uſual operations are at firſt purging and vomiting; after a courſe of it has been continued, it acts diuretically. It is recommended in diſorders of the ſtomach and bowels, in relaxations, and hyſterics.

Macroom, about ſixteen miles from Cork.

A chalybeate water, reſembling the laſt-mentioned.

Maherebeg, near Branden Bay, County of Kerry.

This water is ſalt, and reſembles ſea water in operation and virtues; from a pint to a quart is required to purge.

Mallow, near Cork.

A warm water perfectly tranſparent, and agreeable to the taſte; it keeps in bottles well corked, without loſing it's virtues, which are ſaid to reſemble thoſe of the Briſtol water.

Mechan, County of Fermanagh.

Here are two ſprings, the waters of both which are impregnated with ſulphur, and poſſeſs nearly the ſame virtues as thoſe of Drumgoon.

Mount Pallas, County of Cavan.

This water is chalybeate, and ſeems to be nearly ſimilar to the Hartlepool waters in England.

Nobber, County of Meath.

This water is impregnated with vitriol, and reſembles that of Croſs Town.

Owen Breun, County of Cavan.

The water of this ſpring contains ſulphur, a purging ſalt, and a ſmall portion of native alkali; it is recommended in ſcrophulous and ſcorbutic caſes, and diſorders of the ſkin.

PETTIGOE, County of Donnegal.

This water is more ſtrongly impregnated with ſulphur than that of any other ſpring in Ireland, and contains alſo a purging ſalt; it's virtues are nearly thoſe of the water laſt deſcribed.

ST. BARTHOLOMEW'S WELL, two Miles South Weſt of Cork.

The water of this ſpring, which reſembles the Tilbury water in England in deſcription and virtues, is a chalybeate, but is ſoft, and does not curdle with ſoap; it putrifies if it is kept, when a fœtid ſcum riſes to the ſurface, which has a taſte of iron; in this ſtate, it changes the colour of ſilver, and galls give it a purple tinge, an effect which they do not produce in the freſh water.

SWADLINGBAR, County of Cavan.

This water ſmells ſtrongly of ſulphur, and retains the ſame ſmell in bottles, if they are well corked; it is generally limpid, and without colour, but ſometimes appears troubled and whitiſh.

Like other ſulphureous waters, it tinges ſilver of a black or copper-colour: a white or bluiſh ſcum generally covers the well; and a mud drops to the bottom, which burns on red-hot iron with a blue flame. It is impregnated with ſea ſalt, and contains a foſſil alkali and earth, and reſembles in virtue the water of Drumgoon.

TOBER BONY.

The water of this ſpring, which riſes within four miles of Dublin, is ſweet, and does not curdle on being mingled with ſoap; when the weather is about to change, and particularly on the approach of wind or rain, it grows fœtid: the ſediment thrown on hot iron becomes fœtid and black.

It contains a mixture of earth, alkaline ſalt, and an oily matter, or bitumen; it reſembles in virtues the waters of St. Bartholomew's well.

THRALE, County of Kerry.

This water is chalybeate, of the deſcription of the German ſpas, but leſs powerful; it reſembles in compoſition and qualities the chalybeate water of Iſlington.

C H A P. V.

Of Medicinal Waters in Foreign Countries.

AIX-LA-CHAPELLE, Germany.

THE hot ſulphureous waters and baths of this place have been long celebrated; they ariſe from ſeveral ſprings, from whence eight baths are ſupplied, in ſo many different parts of the town.

At the ſprings theſe waters are perfectly tranſparent, and have a ſtrong ſmell of ſulphur, reſembling the exploſion of gunpowder; but this ſmell goes off on their being expoſed to the air: they are ſalt and bitter to the taſte, and do not appear to be chalybeate; after they have paſſed ſome diſtance from the fountain, they ſeem to be ſo ſtrongly alkaline, that they extract the dirt from linen without ſoap.

The heat of all theſe waters is upwards of 100 degrees of Farenheit's thermometer, and ſome of them very conſiderably more.

When they are firſt uſed, they are diſagreeably harſh to the palate; but after the taſte is familiarized to them, they become pleaſing: when they are firſt taken internally, they frequently affect the head with giddineſs, which alſo wears off by degrees.

They generally act by ſtool, without griping, or reducing the patient's ſtrength; they alſo operate diuretically, and promote perſpiration.

When they are taken as an alterative, the quantity neceſſary muſt be determined by the conſtitution, habit, and other circumſtances; but it is always right to begin with a large wine-glaſsful or half a pint in the morning, and to increaſe the doſe afterwards as may be found convenient. Theſe waters ſhould be drank at the ſprings, and large and repeated draughts are required to purge.

The ſituation and all other circumſtances of the patient's caſe muſt be conſulted, previous to bathing in theſe waters; and the ſeaſon of the year, and degrees of heat of the bath, ſhould likewiſe be conſidered: thoſe which are moderately warm are in general to be preferred, though in ſome caſes the hotter ones are more proper; but even in theſe, it is prudent to uſe the baths of moderate heat firſt, and increaſe it gradually.

Taken internally, theſe waters are recommended in the great variety of diſeaſes which proceed from indigeſtion, or a foul ſtomach and bowels, in rheumatiſms, in ſcorbutic and ſcrophulous caſes, and in diſorders of the ſkin; they are alſo adviſed in hyſteric and hypochondriac diſorders, in weak and debilitated nervous habits, in melancholy, in the gravel and ſtone, in the palſy, in thoſe numerous ills which attend the injudicious uſe of mercury, and in a vaſt variety of other caſes.

They are, however, to be avoided in hectic caſes accompanied with heat and fever, in all putrid diſorders, and in every inſtance where the blood appears to be diſſolved, or the conſtitution is much broken down.

Baden, in Auſtria, Germany.

The waters of this ſpring are warm and impregnated with ſulphur, and are particularly adviſed for gun-ſhot wounds, and complaints which remain in conſequence of them.

Baden-Baden, in Swabia, Germany.

At and near this place are a number of hot ſprings and baths, the waters of which are all impregnated with ſulphur. Taken internally, they purge gently, and are preſcribed in the ſame caſes as thoſe of Aix-la-Chapelle.

Balaruc, in Langardoz, France.

Theſe waters are ſalt and warm, and act as gentle laxatives. They are uſed in thoſe diſorders, for which ſalt purging waters are uſually preſcribed.

Being hot, they are thought ſerviceable in caſes where warm baths are adviſeable, to aſſiſt the operation of internal draughts of ſuch waters, and particularly in palſies and rheumatiſms, and in ſcrophulous diſorders.

Bagniers, in the Bigorre, France.

Here alſo are a variety of warm ſprings, ſome of which taken internally act diuretically, and others purge: their virtues are nearly thoſe of the waters of Aix-la-chapelle.

Bareegs, in the Bigorre, France.

At this place, ſeveral ſprings of hot water riſe, all impregnated with ſulphur, which form four baths.

The waters of theſe ſprings, are at firſt clear; but being ſuffered to ſtand, throw up a thin ſcum, reſembling a pure oil. This ſcum has a ſlight ſmell of ſulphur, or like that of hard eggs; it's taſte is ſoft, but ſomewhat nauſeous, and it is ſmooth to the touch as ſoapy water or oil; it ſhould be drank at the fountain-head, as the volatile parts are loſt by it's being expoſed to the air.

It promotes perſpiration and urine, but does not often purge; the doſe muſt be proportioned to circumſtances, but a quart or three pints is generally ſufficient.

The waters of theſe ſprings have been preſcribed internally in ſcorbutic, ſcrophulous, rheumatic, and paralytic caſes; in convulſions, and remains of the gout.

Externally, they are recommended as a bath or fomentation, in wounds, ulcers, ſtiffneſſes, contractions, and hard tumors: in old gun-ſhot wounds, they are ſaid to give great relief, and in hard knobs in the urethra occaſioned by venereal taints.

Borset, near Aix-la-Chapelle.

Theſe waters reſemble thoſe of Aix-la-Chapelle, but are not uſed internally; externally, they are recommended for the ſame diſeaſes as the water of Bareges, and they are alſo ſaid to be uſeful in dropſies.

Braback, in the County of Naſſau, Germany.

This is a chalybeate water, ſparkling, light, and ſpirituous; it may be kept in bottles well corked, but it ſoon loſes it's virtues on expoſure to the open air. It is ſalt and aſtringent to the taſte, and is ſenſibly impregnated with ſulphur.

It's virtues are nearly thoſe of the German Spas.

Brandola, in Italy,

Is alſo a light chalybeate water, perfectly tranſparent; it is impregnated with ſulphur and an alkaline ſalt, and is ſomewhat acid to the taſte: drank in large quantities, which muſt be proportioned to the patient's ſituation and conſtitution, it is a gentle purgative; but acts chiefly as a diuretic and perſpirative, and is recommended in the ſame complaints, as the Iſlington and German Spas.

Buch, near the Caroline Baths, in Bohemia.

Theſe waters are briſk and pungent to the taſte; but, being impregnated with great quantities of fixed air, they become inſipid when they have been ſome time expoſed to the air. They are recommended in the ſame caſes as the Tilbury and Seltzer waters, containing, like them, a portion of alkaline ſalt, but in a leſs degree.

Caroline Baths, at Carlſbad, in Bohemia.

Theſe waters, which are hot, and contain a foſſil alkali, are preſcribed externally and internally in female and glandular obſtructions, in general relaxations of the ſyſtem, and in thoſe diſorders which are occaſioned by an obſtructed circulation: they are ſaid to be ſo inoffenſive, that they may be uſed with ſafety in all caſes, and at all times.

Chaude Fontaine, near Leige, Germany.

Here are ſeveral hot ſprings which ſupply a great number of baths.

Theſe waters, which are not chalybeate, are impregnated with a foſſil alkali and fixed air, and may be uſed externally inſtead of the waters of Aix-la-Chapelle or Bath.

Cleves, Germany.

This is a lively, ſparkling, chalybeate water, acts chiefly by urine, and reſembles the Pyrmont water.

Das Wild-Bad, Nuremberg, Germany.

A chalybeate, ſomewhat aſtringent to the taſte, and impregnated with ſaline particles.

In obſtructions of the inteſtines, and particularly in female caſes, it is ſaid to be peculiarly ſerviceable.

D'AX EN FOIX, fifteen Leagues Weſt of Thoulouſe, France.

Here are a variety of warm ſprings of different degrees of heat; they are recommended externally and internally for the ſame diſorders as the waters of Aix-la-Chapelle and Bareges.

EGRA, Bohemia.

A briſk and ſpirituous chalybeate water, acting as a purgative and diuretic, and which ſeems of a nature ſomewhat ſimilar to the Cheltenham waters in England.

FRANCKFORT ON THE MAINE, Germany.

In this neighbourhood are two ſprings, one of which is called Faulpump, the other Fons Scabioſorum: they are both ſtrongly impregnated with ſulphur, with a mixture of ſea ſalt, and are recommended in ſcorbutic and ſcrophulous caſes, and eruptions of the ſkin, to deſtroy worms, and to remove obſtructions.

JAMAICA, in the Weſt Indies.

In this iſland are ſeveral warm ſprings, the waters of which may probably be found of the ſame nature, and poſſeſſing the ſame virtues, as thoſe of Bath, Bareges, or Aix-la-Chapelle.

KORYTNA, near Hunnobroda, in Germany.

This ſpring riſes on the ſummit of a rock which is extremely difficult of aſcent, and is ſurrounded by a thick wood. The water is offenſive to the taſte and ſmell, is of a black colour, and depoſits a conſiderable quantity of mud at the bottom of the well. It is ſtrongly impregnated with ſulphur, and adviſed in thoſe caſes where ſulphureous waters are thought ſerviceable.

KUKA, near the Town of Jarowitz, in Bohemia.

The water of this ſpring, which is a lively ſparkling chalybeate, contains a large quantity of fixed air, and the foſſil alkali. It is rather agreeable to the taſte, and the ſmell is ſo pungent as to affect the whole head; when it is heated to a certain degree, it emits a penetrating vapour, highly ſulphureous to the ſmell. It inſenſibly promotes perſpiration; and in ſome inſtances expectoration, and acts diuretically. It is preſcribed in the ſame caſes as the German Spa waters.

MOUNT D'OR, ſeven Leagues from Clermont, in the Auvergne, France.

The water of this ſpring is nearly of the warmth of the moſt temperate of thoſe at Aix-la-Chapelle, and poſſeſſes nearly the ſame qualities. Internally taken, it operates by urine, and ſometimes by ſtool; as a bath, it ſweats profuſely, without reducing the patient's ſtrength.

It is preſcribed in paralytic, gouty, rheumatic, and other chronic caſes.

NEVIS, Weſt Indies.

In this iſland are ſeveral warm ſprings, reſembling thoſe of Jamaica.

NEZDENICE, Germany, near Hunnabroda, in the Diſtrict of the Caſtle of Banow.

This water is vinous to the taſte, and contains much fixed air.

It operates by urine, and is recommended in the gravel, ſtone, diſorders of the kidnies and bladder, gout, rheumatiſm, and other chronic complaints.

PASSY, near Paris,

Is a chalybeate water perfectly clear, ſomewhat acid to the taſte, and ſmelling of the iron: it throws up a conſiderable quantity of air-bubbles.

A very large quantity is neceſſary, if it is required to purge, it's principal operation being by urine. It reſembles the Pyrmont water.

PLOMBIERS, in Lorraine.

This water is moderately warm, ſoft to the touch, and ſalt to the taſte.

It is adviſed for acidities in the ſtomach, in internal hæmorrhages, phthiſic and aſthma, dropſies, diabetes, the dyſentery, and whites, and in diſorders of the ſkin. From one pint to ſix, according to circumſtances, muſt be taken on an empty ſtomach in the morning; it acts as a purgative and diuretic.

Externally, it is eſteemed an excellent lotion for waſhing old ulcers.

Pontgibault, in the Auvergne, France.

The Water of this ſpring, is perfectly tranſparent.

It contains the native alkali, and is vinous to the taſte. It acts by urine, and purges gently; it's virtues are nearly thoſe of the Tilbury water in England.

Pyrmont, in Weſtphalia, Germany.

Theſe wells are in the country of Pyrmont, between a caſtle of that name and the town of Oeſtorff; this water is very ſtrongly chalybeate, tranſparent as chryſtal, and ſparkles like Champagne when it is firſt taken up from the fountain, though this appearance is more or leſs obſervable, as the glaſs is plunged into the reſervoir with greater or leſs violence: it is pungent, ſharp, refreſhing, and pleaſant to the palate; but the ſmell is ſomewhat ſulphureous, and a ſubtile vapour of the ſame kind riſes from the wells, and affects thoſe who ſerve the water with giddineſs; and this effect is moſt perceivable when the water in the wells is nearly exhauſted.

Thoſe who drink it at the well, feel the ſame kind of dizzineſs like intoxication; which may be attributed to the great quantity of fixed air with which this water is impregnated.

Though this water is tranſparent, it has ſomewhat of a milky hue, which increaſes after expoſure, and afterwards changes into reddiſh muddy clouds, by which the particles of ſteel are ſeparated, and riſe to the ſurface in a ſhining glittering ſcum.

It acts as a purgative, if taken in large quantities, though ſome purging ſalt is uſually added to procure this effect; the ordinary operation being as a diuretic and ſudorific, though in ſome conſtitutions it is ſaid to raiſe a ſpitting, and diſcharge the foul humours that way.

It is impoſſible to preſcribe the exact quantity neceſſary, which muſt depend on circumſtances; but as long as it agrees with the ſtomach it will not prove hurtful, and in ſome caſes it relieves even by exciting vomiting.

It is ſaid to correct the ſaline bitter and ſharp humours of the ſtomach and bowels, to reſtore the appetite, and aſſiſt digeſtion: it is alſo recommended in the heart-burn, the green ſickneſs, female obſtructions, and to relieve barrenneſs; in ſcorbutic diſeaſes, and thoſe of the ſkin; in relaxed and broken conſtitutions; and mixed with milk, it is alſo preſcribed in colics and dyſenteries, in apoplexies, epilepſies, and other diſorders of the head, and in thoſe which affect the breaſt and lungs, in which latter caſes it is adviſed to be taken lukewarm; in nervous, hyſteric, hypochondriac, and paralytic complaints; in the gravel and urinary obſtructions, in foulneſs of the blood, and in obſtructions of the more minute veſſels. It is ſaid to correct the texture of the blood when it is in a lax ſtate; and to heighten the ſpirits, without producing the diſagreeable inflammatory effects which follow the uſe of a ſufficient quantity of wine to anſwer this purpoſe.

Though theſe waters bear keeping and carrying to a diſtance, yet as they loſe part of their chalybeate quality, a larger quantity will be neceſſary when they are taken remote from the ſpring, than when they are drank at the fountain-head.

Little preparation is neceſſary to the drinking theſe waters; if, however, the ſtomach and bowels appear to be ſo loaded that their operation is retarded, gentle purges may be proper.

The length of time neceſſary for a courſe of theſe waters, can only be determined by the nature of the diſorder, and the age, habit, and conſtitution of the patient; in ſome inſtances, ten or twelve days uſe of them will bring the deſired relief; in others, as many weeks will be required to effect the intended purpoſe. But it is adviſeable always to begin with ſmall quantities, and to increaſe by degrees to the largeſt neceſſary; and it has been recommended that the courſe ſhould commence in the month of May, and after a few days be diſcontinued, and reſumed again in the beginning of July, and purſued through that and the next month, or ſo much of them as ſhall be found neceſſary.

But it may be right to remark, that thoſe who have received benefit from the uſe of theſe waters, can hardly diſcontinue them wholly with ſafety; the diſorders for which they were originally preſcribed are apt to return, if annual application is not made to the waters, ſo that they ſeem rather to effect a temporary than a permanent cure; yet the conſtitution does not appear to ſuffer the leaſt injury from the frequent repetition of them, numbers having perſiſted in them annually for many years, even to old age, with conſtant advantage.

The length of the courſe may alſo be in ſome meaſure aſcertained by the effect they produce on the patient's ſtomach; whenever they nauſeate, or become diſagreeable, it will be right to diſcontinue the uſe of them.

Some regimen is alſo neceſſary; gentle exerciſe promotes the operation of the waters, and ſhould always be taken even between each glaſs; but the motion ſhould by no means be ſo violent as to produce profuſe perſpiration, and eſpecially before the water has operated.

It is adviſed to take the waters at leaſt an hour or two before breakfaſt; thoſe who can abſtain from that meal, and take an early dinner, will perhaps find it moſt ſalutary.

As to diet, moderation in eating and drinking is the principal rule to be attended to; whenever the human body is diſordered, and whatever be the diſeaſe, abſtemiouſneſs in a certain degree will always contribute to it's reſtoration. Good bread, light animal food, and wholeſome vegetables for dinner, and a ſupper of milk or other ſpoon-meat, will be found the beſt regulated food; and the leſs wine the patient indulges in, the ſooner he may expect a cure: at any rate, every ſpecies of exceſs muſt be avoided, or the waters of Pyrmont will be drank to very little purpoſe.

If theſe waters ſhould occaſion a retention of urine, or produce drowſineſs, giddineſs, reſtleſs nights, cramps, or other diſagreeable ſymptoms of the like kind, it will be right to try a purge or two; but if theſe ſhould prove ineffectual to remove the complaints, it will not be prudent to perſevere in the uſe of the waters.

SCOLLIENSES, in Upper Rhoetia, Switzerland.

This water is chalybeate, and contains a portion of the foſſil alkali, and ſuch a quantity of fixed air as to endanger the bottles in which it is kept.

It operates briſkly, but not ſeverely, by ſtool, and promotes expectoration.

It is recommended in colic pains, and moſt other diſorders in which the ſpa water is preſcribed.

SEDLITZ, Bohemia.

This is a purging water, reſembling that of Epſom in England, but ſo much ſtronger, that two or three tea-cupfuls are generally ſufficient for moſt conſtitutions, and a pint for the ſtrongeſt.

SELTZER, in Germany.

This ſpring riſes near the town of Neider, or Lower Seltzer, about three leagues from Franckfort on the Maine, in an open, fertile, and pleaſant country.

The water burſts from the earth with great violence, is perfectly bright and colourleſs, and throws up a conſiderable number of air-veſſels when it is poured from one veſſel to another.

It's taſte on the palate is an agreeable pungent acid, but it leaves an acrid one on the tongue after it is ſwallowed.

Expoſed to the air for any conſiderable time, it aſſumes the taſte of a vapid alkaline ley, but drops no ſediment, and is fœtid and highly offenſive to the ſmell.

It effervefces with acids, and eſpecially with Rheniſh wines or ſugar, whilſt it is freſh; but ceaſes to produce that effect after it has ſtood ſome time: and though it does not appear to contain any chalybeate, it curdles with ſoap.

It is impregnated with an alkaline ſalt, a portion of ſea ſalt, and a quantity of fixed air.

It does not purge, but operates chiefly by urine, in correcting acidities in the ſtomach, and relieving the heart-burn; it promotes the circulation of the blood, by rendering the juices more fluid, and is therefore preſcribed in glandular obſtructions, and to carry off groſs and viſcid humours.

In the gravel and ſtone, and other diſorders of the kidnies and bladder, it is ſaid to be peculiarly efficacious; and to have been adminiſtered with ſucceſs, mixed with milk, in gouty and rheumatic complaints; and alone, in the ſcurvy, king's evil, eruptions on the ſkin, and thoſe diſorders which are occaſioned by a diſſolved or broken ſtate of the blood. The doſe muſt be proportioned to the caſe, but ſeveral pints of it may be drank in the courſe of the day with the utmoſt ſafety.

As a diuretic, it is recommended in dropſies; and with equal quantities of aſſes milk, in conſumptive caſes, and other diſorders of the lungs.

In nervous diſorders, it may be given either with or without milk, as may be moſt ſuitable to the conſtitution; as well as in hypochondriac and hyſteric diſorders, and in female obſtructions; in the latter caſe exerciſe is neceſſary.

Fluxes, and violent diſcharges occaſioned by acidities in the bowels, are alſo checked by this water; it corrects the milk of nurſes, and renders it more wholeſome and nouriſhing, and prevents it from turning ſour on the infants ſtomachs.

Though it bears keeping and carriage tolerably, yet, as ſome of the fixed air will be loſt, it is moſt efficacious when it is drank at the ſource.

If the water diſagrees with the ſtomach, a ſmall portion of ſome generous wine, or a ſtill ſmaller of good rum, may be added to it, in caſes where theſe mixtures will not be prejudicial.

SEYDSCHUTZ, in Germany.

This ſpring is near that of Sedlitz, and is alſo of a purgative quality, but poſſeſſes more power.

SPA, in Germany.

The town of Spa is ſituated in the diſtrict of Leige, ſix leagues eaſt from that capital; it was formerly a ſmall village, but has many years ſince been enlarged to a town by the inhabitants, who found themſelves obliged to increaſe the buildings, for the conveniency of lodging the great number of ſtrangers reſorting thither for the benefit of the waters.

Moſt of the houſes are built in the form of a creſcent, the outſide middle facing the ſouth, and having a view of the eaſt and weſt and the whole town is ſheltered from the north by a high mountain, which extends itſelf beyond the length of the town.

The country around is for the moſt part heath, woods, and mountains, abounding with ſprings, both of mineral and common water, deſcending in rivulets, and watering the meadows and cultivated grounds, which produce no wheat, but a great quantity of ſpelt and oats, a very ſmall proportion of rye, and ſome flax.

The general face of the country is rough, ſtoney, and full of barren mountains, yielding little elſe than heath and wood, and producing a wild but romantic proſpect. Thoſe who come to Spa for a remedy for their diſeaſes, muſt not expect to find a fine Champagne country, with the fruits and flowers of Italy; but thoſe who delight in hunting and ſhooting, will not be at a loſs for amuſement, as the country abounds with wild boars, deer, hares, heath-cocks, woodcocks, partridges, and moſt other kinds of game.

There are medicinal herbs to be found upon the moſt barren of the adjacent mountains, and in particular wild thyme in great abundance, which is excellent feeding for ſheep, and is the reaſon why the mutton of this country (though ſmall) is preferable to moſt other animal food. The rivulets that deſcend from the mountains, are full of trouts, gudgeons, loaches, and craw-fiſh, which are ſold at a very reaſonable price.

In this town and in the neighbourhood are ſeveral ſprings of excellent chalybeate waters, greater quantities of which are imported into Great Britain, than of any foreign mineral waters.

The principal ſprings were formerly confined to the five firſt hereafter mentioned; but many others have been ſince diſcovered, as will appear from the ſubſequent account.

1. The Pohoun, or Pouxon, which riſes in the middle of the town.

2. The Geronſterre, three quarters of a league ſouth-weſt of the town.

3. Sauvenierre, a league ſouth eaſt from it, and Groſbeck, which riſing cloſe to the Sauvenierre, was formerly included in the ſame deſcription.

4. Wartroz, a quarter of a league to the eaſt of Sauvenierre, and half a league from Spa.

5. Tonnelet, a little diſtance from the Wartroz, on the aſcent of the hill.

Theſe were the only ſprings which were celebrated, till within the laſt forty or fifty years, ſince which time the following have been added.

Sarts, or Niveſet, in the diſtrict of the former name; Chevron, or Bru, in the principality of Stavelot; Beverſe, Couve, Geromont, and Sige, all near Malmdy.

The water of the Pohoun, which is a ſlow deep ſpring, contains a great quantity of fixed air, ſome foſſil alkali, and a portion of earthy matter.

When the weather is dry, and the air cold, and it is in it's perfect undiſturbed ſtate, this water is tranſparent, free from colour or ſmell, and of an acid, vinous, and agreeable taſte; gently taken out of the well, it does not ſparkle or fly, but the inſide of the glaſs appears covered with ſmall air-bubbles; on being poured from one veſſel to another, it ſparkles and throws up large quantities of theſe bubbles to the ſurface.

When the weather is particularly warm, and on the approach of rain, the tranſparency of this water abates conſiderably, and it is apt to be diſturbed, and to aſſume an appearance like whey: in ſuch changes of the weather, it alſo ſeems to be leſs impregnated with fixed air, and to loſe in ſome meaſure it's chalybeate qualities. Previous to ſuch alterations, thoſe who attend this well to fill the water, pretend to hear a rumbling noiſe or kind of murmur in it, which may be occaſioned by the change which is then taking place.

If it is well corked, it bears carriage and keeping better than almoſt any mineral water; but it ſhould not be left expoſed to the air, as the fixed air which it contains in greater quantities than moſt other waters of the like kind, will ſoon evaporate; it is this abundance of fixed air which gives this water it's briſkneſs and agreeable vinous taſte; and it is from the ſame cauſe that it boils with a very inconſiderable heat, and diſſolves additional iron immerſed in it.

Acids mingled with it diſengage the fixed air, and occaſion effervеſcence; but hot or cold it mixes with milk without curdling.

The Geronſterre has a ſmell of ſulphur at the fountain, in which reſpect only it is different from the water of the Pouhon ſpring; like which it has a vinous chalybeate taſte, and is briſk and ſpirituous: the ſulphureous ſmell, which is moſt perceivable in wet weather, vaniſhes entirely if the water is taken to any diſtance from the well.

It acts like the Pyrmont water upon ſome who drink from this ſpring, affecting the head with a giddineſs ſimilar to that which is occaſioned by inebriety; but this does not continue above twenty minutes or half an hour, and in ſome caſes much leſs.

This water is peculiarly cold, and though it does not appear to be impregnated with ſo great a quantity of fixed air as that of ſome of the other ſprings, it bears carriage altogether as well as any.

The Sauvenierre water differs little from the Pouhon, only that it ſeems to contain a greater quantity of acid, and at the fountain has a ſlight ſulphureous ſmell.

Behind and within the ſame well which encompaſſes the Sauvenierre ſpring is another, to which the name of Groſbeck is given, the water of which reſembles that of the Pouhon, in all other reſpects, except that of being rather more vinous and ſomewhat vitriolic to the taſte, and ſmelling ſlightly of ſulphur.

The Wartroz ſpring riſes from a lower ground than any of the others, and is therefore ſubject to have it's waters foul; but there does not ſeem to be any foundation for the apprehenſion of their being purgative; on the contrary, when they are tranſparent, and the well in good order, they are nearly of the ſame nature as thoſe of the Pouhon. This ſpring, as well as the Tonnelet, has been for ſome years neglected.

Notwithſtanding the Tonnelet ſpring is not at preſent in high reputation, it has once not only been compared to the Pouhon, but was actually thought to excel it in brightneſs, tranſparency, and ſprightlineſs: it is totally void of colour and ſmell; and, ruſhing rapidly from it's ſource, does not foul the baſon which receives it; it's taſte is ſo lively and vinous as to reſemble in ſome degree Champagne wine.

It has been determined, by experiment, that this water contains more fixed air than either of thoſe already mentioned; yet this ſpring, as we have already obſerved, is very unaccountably neglected.

Among the other ſprings of more modern diſcovery, the Sarts or Niveſet, is in quality and virtues ſimilar to the Tonnelet, but more unpleaſantly acid and aſtringent to the taſte, and leſs ſpirituous.

The ſpring of Bru, or Chevron, not being ſituated in the biſhoprick of Leige, is but little favoured by the medical practitioners of that city; yet it does not appear to be deficient in any of the virtues which are attributed to the other Spa waters.

The Couve and Beverſe are alſo analogous to the Tonnelet waters, and are in general to be preferred to thoſe of the Wartroz ſpring; the Beverſe water is ſaid to loſe it's virtues by keeping more in proportion than that of Couve.

The La Sige water appears to have little or no chalybeate qualities, at leaſt they are not perceivable to the taſte, which is agreeable, lively, and ſomewhat vinous, yet it ſparkles when it is thrown out of a bottle or poured from one veſſel to another; after being ſome time expoſed to the air, a ſcum riſes to the ſurface, ſhaded with various colours, which ſeems to be occaſioned by it's containing more earthy matter and leſs fixed air than the waters of the other ſprings.

The Geromont ſpring differs only from the laſt-mentioned, in being impregnated with foſſil alkali and a ſmall portion of ſea ſalt.

Upon the whole, it will appear that the waters of all the various ſprings poſſeſs nearly the ſame qualities, differing only in the degrees of them, and that their virtues generally depend on their lightneſs and purity, and the quantity of fixed air contained in them; the active operation of which may probably be enforced by the particles of iron and ſalt with which moſt of them abound, and of which they all partake in a greater or leſſer proportion.

The operation of the Spa waters is moſt commonly by urine, though they ſometimes act as purgatives, and in that caſe produce the effect of changing the colour of the ſtools in the ſame manner as other chalybeate waters; and, like them, have alſo a ſurprizing effect on the ſpirits, procuring a conſtant and equal flow: they act principally on the fibres, which they brace and ſtrengthen; and they are alſo cooling, refreſhing, and invigorating.

They are recommended in an infinite variety of chronic diſorders, and particularly in all caſes where the ſtomach and fibres being relaxed, or the conſtitution having been broken down by exceſſes or diſeaſes, a general weakneſs, languor, dejection, or tendency to waſting has been the conſequence.

Theſe waters have alſo proved highly ſerviceable in all kinds of nervous diſorders, eſpecially where they affect groſs and phlegmatic habits; in ſuch obſtinate coughs and aſthmatic complaints as are occaſioned by relaxation of the pulmonary veſſels; in hyſteric and hypochondriac complaints; in obſtructions of the inteſtines, ſuch as the liver, ſpleen, or other viſcera; in all caſes where the blood is in a broken, diſſolved, or putreſcent ſtate, from irregular living, from ſcorbutic eruptions imprudently repelled, or from diſorders of a putrid tendency.

They are preſcribed in all caſes where the fibres are either too much relaxed, and inclining to introduce a general debility, or ſo irritable as to threaten inflammation; in palſies and epilepſies, in all fluxes and preternatural diſcharges, and particularly the *fluor albus* or whites, and gleets in both ſexes; in the gravel, ſtone, obſtruction of urine; and in ſuch other caſes as require ſtimulating and active medicines; and they are ſaid to aſſiſt in relieving barrenneſs.

But they are forbid, without proper previous evacuations, in all caſes of violent feveriſh heat, and in hot and ſanguine conſtitutions, and ſuch as are affected with a redundancy of bile; in all ulcerations of the inteſtinal parts, and in particular of the lungs, or wherever the matter cannot be diſcharged; and in all ſuch obſtructions as are accompanied with any conſiderable degree of fever.

As the quantity of the doſe muſt in all caſes depend on circumſtances, all directions on this ſubject are uſeleſs: but the patient himſelf will be the beſt judge; and the more he can get down without feeling the inconveniences of ſickneſs or weight at the ſtomach, the better chance he will have of ſpeedy relief. It is adviſeable to begin with a ſmall doſe of a wine-glaſs or two, twice or thrice in a forenoon, and to augment it by degrees to as much as will paſs off with eaſe, without producing any of the diſagreeable ſymptoms already mentioned. When this point is attained, the courſe ſhould be perſiſted in till relief is obtained, or all hope of it is vaniſhed; and in the former caſe, the water ſhould be diſcontinued in the ſame gradual way. In whatever quantities the patient's ſtomach will admit the water to be taken, moderate exerciſe ſhould accompany the courſe; and if it ſhould in the firſt inſtance prove cold to the ſtomach, it may be warmed by placing the glaſs a minute or two in hot water, or by adding as much hot common water as will take off the chillineſs of the Spa water; or a few warm or aromatic ſeeds may be taken after it, till the ſtomach is reconciled to the uſe of it.

During the courſe, a cooling regimen is recommended; all exceſſes, whether in eating, drinking, exerciſe, or indulgence of the paſſions, is to be avoided; the food ſhould be plain, and the animal fleſh ſuch as is light and eaſy of digeſtion.

As a preparation, gentle purgatives are preſcribed; and if the ſtomach appears to be particularly loaded with phlegm, a ſmall doſe or two of ipecacuanha may be uſeful as an emetic. If the water ſhould produce coſtiveneſs, the body ſhould be kept open by a little Rochelle ſalt, or rhubarb, taken now and then in the firſt morning draught of it.

Where theſe waters are directed to be uſed in caſes of too great rigidity of the ſolids, warm bathing is recommended as a previous meaſure; and the ſprings of Aix-la-Chapelle being in the neighbourhood, are uſually reſorted to on theſe occaſions. When the complaint, on the contrary, is apprehended to proceed from too great a relaxation of the fibres, the cold bath is adviſed.

The waters of theſe ſprings are alſo applied externally in many different caſes; they have been uſed with ſucceſs as an injection in female weakneſſes, ſuch diſorders as produce ulcers in the womb, and even in recent venereal diſeaſes; as a lotion for old and offenſive ulcers, and as a gargle for venereal eruptions and ulcers in the mouth, for relaxations in the tonſils of the throat, and to faſten looſe teeth. Taken internally, and uſed as a bath at the ſame time, they are ſaid to cure the itch, and other eruptions on the ſkin.

In the application of theſe waters, regard ſhould be had to their different degrees of ſtrength, as they have been already deſcribed, and they may by this means be ſuited to the various diſeaſes for which they are preſcribed, or to different degrees of the ſame. Some little variation in the qualities of theſe waters will point out which of them are to be preferred in one caſe, and which in another.

SUEHALOZA, near Hungarian Broda, Germany.

This water reſembles in taſte, compoſition and virtues, thoſe of Seltzer and Pyrmont: it is taken by way of common drink; and in this manner of adminiſtering it is ſaid to be ſerviceable in ſcorbutic and ſcrophulous caſes, and in foulneſſes of the ſkin.

TONSTEIN, Electorate of Cologne, Germany.

The water of this ſpring is highly celebrated for it's virtues in thoſe caſes for which that of Seltzer has been recommended: it is impregnated with an alkaline ſalt, ſea ſalt, and a ſmall portion of chalk or chalky earth, and has a lively vinous taſte whilſt it is freſh, which is loſt after it has been kept or expoſed to the air. When firſt drawn from the fountain, it is perfectly tranſparent; but being ſuffered to ſtand, the fixed air evaporates, and it becomes foul and cloudy.

This water is frequently uſed medicinally as a common drink, either alone, or mingled with wine: it operates by urine, and is ſaid to be excellent in removing glandular and other obſtructions; in the ſcurvy, king's evil, and leproſy; in the dropſy; and in the gravel, ſtone, and other urinary complaints; as alſo in exceſſive diſcharges ariſing from acids in the bowels, and in heart-burn and other diſorders occaſioned by acidities in the ſtomach.

VAHLS, in the Province of Dauphiny, France.

This water is very nearly of the taſte, qualities, and virtues, of that laſt-deſcribed; it is commonly carried to Paris for uſe, but loſes it's vinous taſte by keeping and carriage, and becomes vapid and brackiſh. A ſpring of nearly the ſame water, but leſs powerful, riſes in the ſame neighbourhood; this is called La Marie.

WILDUNGAN, Waldeck, Germany.

The water of this ſpring reſembles in ſome meaſure that of Tilbury, but is ſo much weaker, that it is ineffectual to remove obſtinate chronic diſorders; but duly perſiſted in for a conſiderable length of time, and taken in large quantities, it is an excellent preventive of gouty, rheumatic, or ſcorbutic complaints, and to carry off the remains of theſe diſorders, and prevent the return of them.

ZAHOROVICE, near Nezdenice, Germany.

This water is rather acrid to the taſte, and ſomewhat more ſalt, though leſs acid, than that of the Nezdenice ſpring: this water is alſo offenſive to the ſmell.

It is recommended in ſcurvy, king's evil, leproſy, and other diſorders of the ſkin.

CHAP. VI.

Of Sea-Water, and Bathing in the Sea.

THOUGH in treating of different diſorders we have had frequent occaſion to ſpeak of the virtues and efficacy of *ſea-water*, both taken internally as a medicine, and applied externally in bathing, or as a lotion or fomentation; yet we are of opinion that this noble medicine, ſo much more general in it's uſe than is uſually conceived, and ſo eaſily obtained in this iſland of Great Britain, deſerves our very particular attention; more eſpecially as in certain caſes where purgatives are required, it's operation in many particulars excels that of moſt other laxatives, and may actually be applied with ſafety where other medicines might be dangerous.

That vaſt collection of waters which we call Sea, ſurrounds the whole earth, and conſequently waſhes whatever is contained between it's oppoſite ſhores, ſuch as marine plants growing beneath the ſurface of this fluid, or adhering to the rocks which are at certain times overflowed by it, ſalts, fiſhes, marine animals, minerals, and a thouſand other ſubſtances with which the bottom of the ſea abounds, and is enriched with the particles which it receives from theſe bodies, and which are either waſhed off from them, or paſs into the water by tranſpiration, and endeavouring to eſcape into the air, are intercepted by the water, and mingle with it: of theſe particles the chief part are, however, ſalts, which preſerve the water from putrefaction, and give it a more oily and ſoapy quality than ſpring-water. To theſe component parts may alſo be added ſulphur, which it receives from certain ſteams and effluvia, which conſtantly paſs into this body of water.

Theſe various cauſes conjoining ſeem to conſtitute that fluid which is called Sea, and which the all-wiſe Creator of all things ſeems to have deſigned to be a kind of univerſal common defence againſt the corruption and putrefaction of ſubſtances, and in particular of animal bodies; and in thoſe climates where the ſun's heat is more intenſe, and therefore more apt to corrupt fluids, the ſea has been found by obſervation and experiments to be the moſt ſalt.

Nor is this wonderful collection of waters, thus preſerved from corruption by the aid of ſalt, confined to the uſes alone which we have already mentioned; it alſo performs the Almighty will, and ſerves his all-wiſe purpoſes in a variety of ways. The ſun, which ſeparates the freſh water from the ſalt, and gently attracts it upwards, cauſes alſo many ſulphureous and nitrous particles to aſcend in the ſame vapours, which being diſperſed in the air and driven over every part of the globe, may be probably the cauſe of many if not all the various phænomena and changes of the air; and having performed this deſtined taſk, ſo ſalutary to mankind, the fluid itſelf falls to the ground in the ſhape either of dew, rain, hail, or ſnow, and refreſhing the productions of the earth, affording water to all the animals which inhabit it, and augmenting the ſprings deſtined to the uſe of men, with a liquid of the pureſt quality, the ſuperflux runs into the rivers, and thence into the ſea, the common parent, where it becomes again impregnated with the ſame particles, and is ready to reſume the ſame functions.

The principal qualities of ſea-water are ſaltneſs, bitterneſs, nitroſity, and oilineſs.

Of ſalt it has been computed, from the experiments of a moſt ingenious natural philoſopher, that every gallon of ſea-water contains five ounces and a half; ſo that beſides the other parts abovementioned, every pint of ſea-water has five drams and a half of ſalt; and therefore this quantity is generally ſufficient to give three or four ſmart ſtools to a grown perſon of good conſtitution. This ſalt conſiſts of a peculiar acid and a mineral alkali, but the acid part is ſo obſtructed by the other that it can ſcarcely exert any power, and the ſalt is of ſo fixed a nature that it never yields to putrefaction, and preſerves other bodies ſo remarkably that the ſame learned and laborious enquirer found that three drops of the ſpirit of ſea-ſalt in an ounce of water, would preſerve fleſh for a conſiderable time from putrefaction; and that, on immerſing a piece of raw beef in ſea-water, it's aſtringent power was ſo great that it contracted the minute blood-veſſels, ſo that no blood would flow from it.

The quality of bitterneſs is ſuppoſed to be acquired from the bituminous parts of the adjoining earth; and it is probable that ſulphureous exhalations are expelled by ſubterranean fires, and impregnate the ſea-water in the ſame manner as the ſteams of ſulphur are diſperſed through wine; from whence alſo may ariſe a circumſtance which has been often obſerved, that the deeper the water is taken the more bitter it is; perhaps theſe bituminous and ſulphureous particles aſſiſt the ſalt in the diſperſion of tumors, as phyſicians have always eſteemed bitumen to be a diſſolving medicine, compoſed of ſalt, ſulphur, and a ſmall portion of earth.

From the bitter ſalt and the oleous bitumen of the ſea-water, the ingenious philoſopher already quoted, is of opinion, the nitroſity of this water proceeds; and adds, that ſea-water does not ſo readily extinguiſh fire as ſpring or other freſh water, which he attributes to the nitrous as well as the bituminous and ſulphureous particles with which this water abounds.

The laſt quality aſcribed to the ſea-water is oilineſs, and this has been proved by repeated experiments; in particular, it has been found that two pounds of ſea-water will not diſſolve as much ſalt as the like quantity of ſpring-water by half a dram, though their ſpecific gravities are equal, which has been attributed to it's oilineſs; and that ſea-water, though deprived of it's ſalt, retains a certain viſcid matter, which ſticks to the ſide of the veſſel if the water is diſturbed, but ſinks to the bottom if it is ſuffered to remain motionleſs. This oilineſs is not diſcoverable in ſpring-water; and this quality appears alſo in ſea-ſalt, which being liquified in a moiſt air, lets fall it's earth with an oily, pungent, and aſtringent liquid.

The ſea-water, uſed internally, acts according to the quantity taken: in ſmall doſes, it ſtimulates and heats, diſperſes and breaks the finer fluids, and produces thirſt; in larger quantities it proves a moſt excellent purge, cleanſing the body of all foul and malignant humours, without depriving it of ſtrength or bringing on laſſitude, languor, or dejection of ſpirits, effects which a repeated uſe of moſt other laxative medicines occaſion in all caſes; and it is for this reaſon that the uſe of the ſea-water may be purſued, and it's operation kept up without injury, for ſo conſiderable a length of time, that obſtinate and chronic diſeaſes frequently yield to it, after all other remedies have been tried in vain.

The only preparation neceſſary to a courſe of the ſea-water, is when there is a diſpoſition to fever, heat, or inflammation, and in very full and ſanguine habits; in any of thoſe caſes, purging and a cooling regimen will be proper, and in the latter bleeding, previous to the internal uſe of it.

It has been recommended and tried with ſucceſs, in all glandular complaints, and even thoſe which affecting the inteſtines or lungs, threaten a conſumption; in obſtructions of the ſpleen and liver, and thoſe which occaſion jaundice; in obſtructions of the kidnies, when there is no inflammation, nor any ſtones too large to paſs the urinary paſſages; in weakneſs of the ſtomach and loſs of appetite, which it reſtores, and aſſiſts digeſtion.

It is of excellent uſe in carrying off groſs humours, occaſioned by exceſſes or irregularity of living, or by indulging in high food, and neglecting to uſe proper exerciſe; and it acts infallibly in ſcouring viſcid mucus and worms from the inteſtines.

Externally uſed, infinite benefit is derived from it in preventing and removing the deleterious effects of the bites of mad animals; in the rickets in the leproſy, both moiſt and dry; in the itch, in ſcorbutic complaints, and in particular ſuch as produce blotches, ſcabs, or ſpots on the ſkin; in palſy, epilepſy, and convulſions: but in all theſe diſorders the internal uſe of the ſea-water muſt accompany the external application of it.

But the diſeaſe in which of all others, this invaluable remedy hath proved moſt effectual, is the ſcrophula, or king's evil: a diſorder ſo obſtinate as ſcarce ever to be ſubdued by the powers of any other medicines; ſo loathſome as to be univerſally dreaded; and ſo inveterate as to be generally underſtood to be hereditary, and to taint the blood from generation to generation, perpetuating to diſtant poſterity the misfortunes of their ill-fated anceſtors.

In treating of this diſorder, we have pointed out the uſe of the ſea-water, both as an internal medicine, and as a bath, in all the various appearances, and in every ſtage of it; and we ſhall only add here, that the earlier the application is made to this remedy, the probability of ſucceſs will not only be the ſtronger, but the dangers of ſcars, carious bones, and loſs of joints, will in all probability be averted. Should, however, theſe ſtrumous tumors be unavoidably opened and become ulcers, the wounds may not only be dreſſed with the froth of the ſea, as we have already adviſed, but the juice of the *quercus marina*, or common ſea-weed, may be expreſſed and applied to the wounds.

But the beſt recommendation which can be given of ſea-water in this otherwiſe invincible diſeaſe, will ariſe from the following Caſes, which we have extracted from an infinite number, inconteſtibly proved by authorities undoubted and unqueſtionable; and we earneſtly adviſe ſuch of our readers as have either themſelves the misfortune to be afflicted with this diſeaſe, or to be connected in friendſhip or conſanguinity with thoſe who labour under it, to peruſe theſe Caſes with attention, becauſe they may not only derive from them the comfortable proſpect of cure in the moſt deplorable caſes, but receive ſuch directions for the uſe of this remedy as may in moſt inſtances be applied to advantage.

CASE I.

A Young lady of noble birth, juſt entering upon her ſeventeenth year, was troubled with hard ſwellings, continually riſing near the breaſts, under the ears, and in other parts of the neck, to ſuch a degree, that ſhe had no reſt from the diſeaſe, nor any remiſſion from taking phyſic.

In one place a knot would ariſe, grow, ſuppurate, and be healed with extreme difficulty; and this would be ſcarcely covered with ſkin before a new knot would riſe in another place, and beginning to ſuppurate, afforded melancholy expectations of others to ſucceed.

When things were in this ſituation, and the diſeaſe had long exerciſed the patience of the unfortunate lady and her friends, and no relief could be obtained from calomel, mercury, præcipitate, and other mercurial medicines; when burnt ſponge, coraline, wood-lice, lime-water, and a thouſand other preparations had been tried, which, though they ſometimes gave ſome little temporary relief, were of no uſe to diſperſe and effectually eradicate the diſeaſe. She was directed to be removed to the ſea-ſide, ordered to bathe in the ſea every morning, and to drink as much ſea-water as would give two or three ſtools a-day, and to waſh the ulcers and the hardened glands frequently with the ſame water warm: by theſe methods, continued about two months, the ulcers were healed up, and ſome of the ſtrumous knots entirely diſperſed, and the reſt ſo ſoftened that the patient recovered her former health, and returned to town; where, having thus experienced the ſalutary effects of this remedy, ſhe was adviſed to continue the uſe of it, which ſhe perſevered in both internally and externally, and from that time remained entirely free from her old ſcrophulous diſorder, or from any new attacks of it.

CASE II.

A Young lady of the firſt rank, about ſix years old, was troubled with a knotty ſcrophulous ſwelling upon her upper lip; the glands of her arm-pits were increaſed in bulk and grown hard; her belly was unequally ſwelled, with hard knots here and there, which did not yield to the touch: to this was joined a dry cough, without ſpitting; and ſome difficulty of breathing, eſpecially at night.

Theſe apparent ſtrumous ſymptoms in the lip and the glands under the arm-pits, gave ſtrong ſuſpicion that the glands of the lungs and meſentery, were infected with the ſame taint, that they were ſwelled and grown hard, and that without timely aſſiſtance, there was danger of the formation of matter in theſe parts, which would produce a conſumption of the lungs and an atrophy or waſting away of the fleſh.

After bleeding, five ſpoonfuls of ſea-water were adminiſtered every morning and night, which generally procured three mucous and very fœtid ſtools; the patient was alſo directed to waſh her lip often every day with ſea-water.

By this method ſtrictly continued for a month, the lip and axillary glands were ſoftened, the belly returned to it's natural condition; and the work ſo happily begun was finiſhed in three months more, in which time the ſwelling of the lip was entirely ſubſided, the knots of the belly were no longer to be felt by the fingers, the glands under the arm-pits were reduced to their natural ſtate, and the cure was in all reſpects compleated.

CASE III.

A Beautiful and amiable young lady, ſcarcely entered into her nineteenth year, having always enjoyed a perfect ſtate of health, by an accidental fall ſtruck her left leg againſt a ſtone, but only ſo as to raze the ſkin. This ſeemed to be a ſlight hurt, and perhaps in a thouſand others leſs delicate, and of a better conſtitution, it would have proved of no conſequence; but the blood which nouriſhed this lovely form was infected with a ſcrophulous taint, which from this ſlight cauſe took fire as from a ſpark, and broke out ſoon after into a moſt dreadful conflagration. This ſlight wound was at firſt neglected, and nothing applied to it till the ſkin round it appeared inflamed and diſtended; the patient was then directed to be bled, which was three times repeated, and cooling purges were given, emulſions prepared with nitre, and ſuch other medicines as ſeemed likely to appeaſe the violent emotions of the blood. Such outward remedies were alſo applied as were of a ſoftening and diſcutient quality, under the care of a very ſkilful ſurgeon: but theſe medicines and applications were tried in vain; the wound increaſed every day, and the inflammation now tended towards a ſuppuration; therefore, leſt the bone underneath ſhould receive injury, as ſoon as the matter began to form, the abſceſs was opened by the aſſiſtance of a cauſtic, and all poſſible means uſed to cure the wound: but in ſeven weeks from the time the accident happened, there was not the leaſt appearance of healing the ſore: the wound grew foul, and the ſurrounding fleſh ſoft and fungous; the edges were inverted, and inſtead of a white, ſmooth, and even matter, a thin fœtid and bloody humour was continually diſcharged. Nor was the cauſe of theſe dreadful ſymptoms long concealed, for upon a careful examination of the ulcer by the help of a probe, the bone was found to be ſtripped of it's membrane, and to be itſelf uneven, rough, and carious; it was therefore neceſſary to enlarge the wound, to make inciſions in the affected part quite to the bone, to cleanſe it, and as much as poſſible, to promote an exfoliation (or ſcaling of the bone;) nor were theſe endeavours unaccompanied by the beſt internal medicines which could be deviſed to temper the ſharp viſcid humours and render them fluid, or carry them off by gentle purgatives, for very ſmall doſes of calomel, repeated at proper intervals, and boluſſes compoſed of crude antimony, Æthiop's mineral, and the like medicines, with a vegetable diet, drinks prepared of lime-water, varied as the caſe of the patient ſeemed to require, and ſometimes mild emetics, were at different times employed; and for fear of a hectic fever, recourſe was had to aſſes milk and teſtaceous powders, taken twice a day. In ſhort, the art of phyſic was exhauſted in attempts to afford the patient relief, in ſpite of all which her diſeaſe gained ground, and every day added ſome new and aggravated ſymptom.

Eight months had now elapſed ſince the unhappy lady had laboured under this diſorder, nor had all the efforts of medicine yet produced any hope of recovery, nor any ſigns that the bone would exfoliate.

The bark and a ſlight ſalivation were now propoſed as expedients, from one of which hopes might be entertained of bringing the humours into a better ſtate; but the one was rejected on account of the patient's ſtrength being much exhauſted, and her being alſo inclinable to a diarrhæa; and the other gave little hopes of effecting a ſeparation of the bone, though perhaps it might have given her more ſtrength, and might have relieved the hectic fever.

There remained yet one remedy untried,

the ſea-water; and as the diſeaſe was ſo far advanced, no time was to be loſt in making this laſt experiment; the patient was accordingly removed to the town of Newport in the Iſle of Wight; and all other medicines but aſſes-milk being laid aſide, ſhe entered on a courſe of ſea-water, in the uſual manner, which at firſt occaſioned as uſual a nauſea and thirſt; but theſe inconveniences vaniſhed in a very few days, the water purged her at leaſt thrice a day, nor did ſhe perceive her ſtrength or appetite impaired by repeating this purgation, but on the contrary, an improvement was daily perceived in both, and growing chearful upon this favourable change, and aſſuming freſh reſolution from the hope which now appeared of recovering her health, ſhe began to bathe alſo in the ſea, at firſt only twice a week, then three times, and at laſt every day; and always after her bathing ſhe returned home with additional ſtrength and ſpirits, and after a month unremittingly ſpent in drinking and bathing, the appearance of the ulcer was changed for the better, the thin, fœtid humour, that daily flowed from it in large quantities, was now turned to a white thick matter without being offenſive to the ſmell, and the quantity was conſiderably diminiſhed; the edges of the wound appeared ſoft, even, and depreſſed, and at length the corrupted part of the bone began to ſhake upon the touch of the probe, and was ſoon entirely ſeparated from the ſound part. From that time all things went on ſucceſsfully; the cavity of the ulcer decreaſed every day, the white or bluiſh edges grew cloſer together, and dried up, and in three weeks more the wound was covered with a firm ſcar: ſhe ſoon recovered the uſe of her leg, and after a confinement of a full year, ſhe appeared in public with a perfect re-eſtabliſhment of health, and never had any return of the diſorder.

To the caſes already offered, of cures effected by the ſea-water in ſcrophulous caſes, it may not be improper to add one of an obſtinate jaundice, ultimately and effectually relieved by the ſame efficacious remedy.

A man, thirty years old, of a phlegmatic conſtitution, and of a relaxed and ſpungy habit of body, after drinking a large quantity of ſpirituous liquors, to which he had been too much addicted, was ſeized with a ſudden and violent pain about the pit of his ſtomach, which extended alſo over all his back, as far as his ſhoulder-bones, and would neither permit him to breathe, walk, or ſtand upright: he had a foul and bitter taſte in his mouth, a perpetual nauſea, and a continual retching up of gall. In this ſituation a large quantity of blood was taken away, and a gentle purge was adminiſtered, which procured two or three ſtools, and afforded ſo much relief, that he was apprehended to be out of danger. But the ſymptoms ſoon returned, and a confirmed jaundice became evident from his whole ſkin becoming yellow, and in particular the whites of his eyes and about the temples: he complained of great laſſitude, and ſeemed to have a particular diſlike to all kind of motion; his ſtrength was amazingly exhauſted, conſidering the ſhort time he had been indiſpoſed; his breathing was difficult, his excrements ſmall in quantity, white, and ſomewhat ſlimy; his urine thick, and ſo diſcoloured that it was almoſt black, and the pain which he firſt felt was changed to one more dull, with a troubleſome ſenſe of great weight under the falſe ribs; but without any hardneſs or perceivable tumor. As the obſtructions in the paſſages of the gall are the immediate cauſes of the jaundice, the uſual and proper medicines were adminiſtered to remove them; yet, though the ſymptoms ſeemed to abate, and the diſeaſe to give way in ſome meaſure, the ſkin did not return to it's natural colour, or loſe it's yellowneſs, the pain and ſenſe of weight remained, and, what was ſtill worſe, the patient's appetite and ſtrength were both nearly gone; under theſe circumſtances, the ſea-water was preſcribed in the quantity of half a pint every morning, which was directed to be warmed, and an electuary of the following form was adminiſtered, to the amount of a tea-ſpoonful in the middle of the afternoon, and at going to reſt.

Of conſerve of orange-peel, one ounce—cinnabar of antimony prepared, and Caſtile ſoap, of each half an ounce—of wood-lice prepared, three drams—of ſaffron powdered, half a dram—of ſyrup of orange-peel, enough to make an electuary.

Theſe preſcriptions being purſued, in four or five days a favourable alteration took place; the jaundice hue began to diſappear by degrees, the ſtrength and appetite returned, the water occaſioned a diſcharge by ſtool of a vaſt quantity of bilious and ſlimy matter, which entirely carried off the pain and weight in the ſides, and in about three weeks the patient recovered his health entirely.

CHAP. VII.

Of Medicated Baths, vaporous and dry Baths, and internal and external Fumigations.

THOUGH the ancients appear to have been well acquainted with the nature and uſe of artificial medicated baths, and recommended them as ſure and excellent remedies for the prevention and cure of a great variety of different diſeaſes; yet, either the art of compoſing them, or the method of applying them, has been long loſt, if it was ever known, in this country; or they have been brought into diſeſteem by imprudent practice, or by the management of deſigning men.

But from which of theſe cauſes, or from whatever other, the neglect of theſe remedies has ariſen, certain it is, that they were wholly unpractiſed in theſe kingdoms thirty years ago, and that we are indebted to the ſkill and perſeverance of an ingenious foreigner, for bringing them to an equal degree of perfection and reputation; and, according to a publiſhed and well-authenticated liſt of cures, for reſcuing many unhappy ſufferers, in the extremity of obſtinate, tedious, and complicated diſeaſes, from the fate which ſeemed to await them, and by an agreeable and eaſy proceſs reſtoring them to health and comfort.

It is from this ingenious foreigner that we have derived the accounts of thoſe improvements in the arts of healing, which we now mean to offer to our readers; and we ſhall add a few Caſes from thoſe which appear moſt worthy attention, as the beſt information which can be given of the virtues and efficacy of theſe celebrated baths.

The apparatus of thoſe in London, conſiſt of five medicinal water baths; ſix vapour baths; two dry baths, in ſeparate rooms, unconnected with each other; ſix bed-chambers for ſweating; a large drying room; two waiting rooms; two chymical elaboratories, in which are prepared the medicinal waters and vapours. Theſe apartments are on the firſt and ſecond floors, and beneath are baths conſtructed or conſtructing for the lower and middle claſſes of people: under ground are the furnaces, aqueducts, ciſterns and reſervoirs of large ſizes, for the different ſolutions and combinations of artificial mineral waters; in the diſtribution of which, and for modifying the various degrees of heat, above 2500 feet of copper pipes are employed, and an equal number of leaden ones, with 150 braſs cocks of different dimenſions: the water uſed in the various ſolutions and infuſions of the ſeveral ſubſtances neceſſary for the cure of many complaints, are rain-water, ſpring-water, and New River water the choice of which, for different purpoſes, is ſaid to be of conſiderable importance. Annexed to theſe warm baths are two other baths, one of which may be either ſuddenly heated or cooled, as circumſtances may require; the other is a capacious cold bath of new and improved conſtruction, and ſupplied with water from a ſpring which is conſtantly running.

The baths, and other apartments for females, are totally diſtinct and apart from thoſe appropriated to the uſe of the other ſex, and are approached by different avenues.

Patients are invited to reſide in the houſe of the operator, during a courſe of theſe baths and fumigations, for the following obvious reaſons: the firſt and principal is the neceſſity of conſtant attention to the changes effected by theſe operations, ſome of which are ſo ſudden, as to require immediate alterations in the courſe, which cannot be made after the patient is brought into the houſe to take the baths, if he does not reſide in it; many conſtitutions will be endangered by colds, to which patients are liable, notwithſtanding every precaution, who are taken into the air after uſing the baths, vapours, or warm fumigations; ſome who are previouſly worn out with pain or the effects of medicine, though relieved and refreſhed by the operations, will require immediate retirement and reſt; and to others nouriſhment as well as reſt will be neceſſary before it is fit for them to be removed, and to undergo freſh fatigue; for the accommodation, therefore, of patients who wiſh to enjoy the whole benefit of theſe inventions, apartments are provided, and adapted to various ranks in life, from the higheſt to thoſe in moderate ſituations, and convenient rooms are alſo ſet apart for the reception of out-door patients, whilſt their baths are getting ready, and other neceſſary preparations making.

In the ſeveral baths, the degrees of heat are regulated by thermometers; and the whole machinery is ſo conſtructed, that the patient himſelf may, during the operation, increaſe or diminiſh the degrees of heat and cold, as convenience or inclination directs: and the whole form together a compleat ſyſtem of baths, divided into hot, warm, and cold, each under ſuch regulations as to bring it nearer to or remove it farther from the next degree, as occaſion and different circumſtances may require.

The terms of adminiſtering theſe remedies are moderate; and if a cure can be obtained by theſe means, the expence will fall ſhort of that commonly incurred in an ordinary courſe of medicines: for patients who chuſe to reſide in the houſe, apartments are provided from four guineas a week to one, and to ſuch each operation is only attended with an additional charge of three ſhillings and ſixpence, except dropſical patients, who uſe the dry ſtove and bed prepared for this particular diſorder, for which they are to pay five ſhillings each time. Thoſe who do not take up their reſidence in the houſe, pay twelve ſhillings for each bathing or fumigation, and fifteen ſhillings for the apparatus particularly applied to the dropſy: and thoſe whoſe caſes threaten to require a long and continued courſe of theſe applications, may be furniſhed with tickets entitling them to the uſe of the different baths and fumigations for 20, 50, or 120 times, at rates not exceeding five ſhillings each time. We have mentioned the prices for the information of ſuch of our readers as may not have opportunities of ſeeing the plans, which have at different times been promulgated in the metropolis.

Theſe water baths and effluvia are impregnated with ſuch medical ſubſtances, animal, vegetable, or mineral, as have been found by experience to afford relief in the ſeveral diſorders to which they are intended to be applied; and the degrees of ſtrength are proportioned, as well as the heat, to the conſtitution, habit, and ſituation of the patient, the violence of the diſeaſe, and other circumſtances.

And if, according to the opinion of phyſicians ancient and modern, conſtitutions may be altered, and diſeaſes cured by remedies externally applied, by altering the diſpoſition of the maſs of fluids, without producing any alteration in the inſenſible evacuation; or by breaking the texture of the diſeaſed matter, ſo as to enable nature to throw it off by ſweat, or inſenſible tranſpiration; theſe medicated baths ſeem to be ſafe and eligible, as they not only promote the diſcharge of offending matter, but ſupply nature through the abſorbent veſſels, with a ſalutary effluvia to replace the loſs of that which is rejected; and by the ſame means the fineſt and moſt efficient parts of the medicines of which theſe baths are compoſed, or with which they are impregnated, are conveyed into the blood, and carried by the circulation into the minuteſt veſſels of the human body.

The operation of theſe baths and fumigations is alſo aſſiſted by frictions, which in many caſes are of infinite uſe; and in particular in conſumptive caſes, rubbing the muſcular parts hath often been attended with the moſt favourable effects.

To theſe may be added the pump, throwing the medicated water partially on the particular parts of the body which are affected; in preſcribing or ordering which, regard muſt be had to the part on which it is to be applied, the degree of heat and force neceſſary, and the particular medical quality with which it ſhould be impregnated; and to anſwer theſe purpoſes, the pumps are ſo conſtructed, that the quantity of the falling water is at pleaſure increaſed or diminiſhed, either with or without leſſening or increaſing it's force, from the ſmalleſt ſtream to the quantity and ſtrength of a fire-engine, the ſtrength and quantity of medicine with which they are impregnated, being alſo proportioned to the nature and exigency of the caſe.

The diſorders in which theſe various preparations are applied with ſucceſs, are the ſcurvy, diſorders of the ſkin, ſuppreſſion of any of the ſecretions, conſumptions, dropſies, gout, rheumatiſm, obſtructions, palſy, epilepſy, ſchirrhous tumors, ulcers, white ſwellings, contractions, relaxations, fevers, nervous diſorders, aſthmas, weakneſs of body, ſcrophulous and venereal complaints, retenſion or ſuppreſſion of urine, gravel and ſtone, head-ache, deafneſs, and many other diſeaſes both acute and chronic.

But beſides the above-mentioned water and vapour baths, medicated with vegetable and mineral ſubſtances, others of a different nature are offered, ſome compoſed wholly and others partly of oil, ſome of milk and ſome of broths; all which have been uſed with ſucceſs in particular caſes, but being neceſſarily attended with a very conſiderable additional expence, an eſtimate is previouſly given, that the patient or his friends may judge of the prudence or convenience of having recourſe to them; ſome vapour baths and fumigations are alſo propoſed, made only with the effluvia of liquid balſams and eſſences, and theſe are alſo of courſe expenſive.

Upon the whole, there appears much ingenuity in the conſtruction of the whole apparatus, which is as compleat and extenſive as the nature of ſuch a plan in it's fulleſt extent will admit; the uſe of it ſeems to be rational, and the benefit which we are taught to expect from it, ſupported by the ſtrongeſt probability; nor do we wonder that in caſes where the other remedies have been tried in vain, theſe ſhould frequently prove efficacious, becauſe moſt chronic complaints are undoubtedly occaſioned by obſtructions; and the uſe of warm baths, vapours, pumps, and frictions, ſeem obviouſly calculated to remove them, eſpecially when theſe applications are perſiſted in for a regular courſe, as is always recommended by thoſe who undertake to attempt cures in this way, as the only probable chance of receiving the expected benefit.

CASE I.

A Young lady, daughter of an eminent ſurgeon of London, got a cold in the paſſage of the Opera-houſe waiting for her carriage, and was ſeized with hoarſeneſs and a cough. In the courſe of ſeven or eight weeks, the expectoration was full of matter, and in great quantity, attended with every perypneumatic ſymptom, ſuch as inflammation of the lungs, difficulty of breathing, pains in her breaſt and ſides, ſo that ſhe was not able to lie down in bed; her pulſe was ſmall, and beat at the rate of one hundred and fifty pulſations in a minute, horrible pains ſpread from the breaſt to the ſhoulders, a fixed deſtroying obſtruction prevailed, and what moiſture appeared on the ſkin was only produced by the violence of coughing. Every method had been taken for her recovery by ſeven of the moſt eminent of the faculty, ſuch as twenty-five times bleeding, repeated bliſtering, emulſions, aſſes-milk, and the like, without effect. She was not able to ſtand a minute upon her legs, and ſending her to Briſtol was adviſed as the laſt reſource; but as it was apprehended ſhe would not live ten days, it was then recommended to her friends by a phyſician and a ſurgeon to try the medicated baths, ſtoves, and fumigations, from a conviction, that much good had been effected by them in ſimilar deſperate diſeaſes: this trial was made for a few days, as ſhe was at firſt thought to be too far gone; but in ten days ſhe was able to lie flat in bed, her cough became much abated, the expectoration of matter leſſened, there was no ſign of blood, an univerſal gentle perſpiration appeared, the reſpiration continued free and eaſy, and enſued without pains, which before were excruciating. The obſtructions were opened, her pulſe was reduced under one hundred pulſations, and her appetite was greatly mended; in five weeks ſhe was able to walk a mile, in a ſhort time was quite recovered, and has ſince remained in the moſt perfect ſtate of health.

CASE II.

A Lady of fortune was afflicted from the year 1767, with ſuch a total obſtruction as prevented the leaſt perſpiration or moiſture on her ſkin, attended with conſtant excruciating pains in her ſtomach, being almoſt every night, from convulſions, and ſpaſms, obliged to get out of bed and roll on the floor for three or four hours together, her whole nervous ſyſtem being extremely affected and weakened; ſhe was in this condition for ſix years, during which time ſhe could not retain any kind of food in her ſtomach for half an hour, and frequently had horrible vomitings, attended with the moſt vehement hyſterics and convulſions, ſo that ſhe was confined to her bed for ſix weeks together, and the very little reſt ſhe could obtain, was from taking almoſt every night a large quantity of liquid laudanum, with three or four pills of the extract of opium, which rendered her at intervals ſtupid. As her rank and ſituation in life enabled her to have the beſt advice, ſhe conſulted the ableſt phyſicians of London, Bath, Briſtol, and other parts of England, but without effect: at length, deſpairing of relief, and reading in the public newſpapers, the ſurprizing cures performed by the bathing and fumigating inventions, ſhe put herſelf under a courſe of them, and, by adminiſtering to her night and morning the medicated water baths, vaporous baths, moiſt and dry fumigations and frictions, in eleven weeks her obſtructions were opened, her perſpiration was recovered, her ſpaſms and convulſions were removed, her ſleep, ſpirits, and vigour were reſtored, her digeſtion, and nervous ſyſtem were ſtrengthened, and ſhe was bleſſed with the enjoyment of perfect eaſe and health.

CASE III.

A Merchant of London, of a ſcorbutic habit, was attacked with a nervous complaint, which having been injudiciouſly treated in the beginning, grew worſe every day: unfit to tranſact his buſineſs himſelf, he was obliged to truſt the management of it to others, who, taking the advantage of his indiſpoſition, impoſed upon him, and injured his affairs. Theſe circumſtances aggravated his complaint, ſo that by degrees he grew melancholy, his pulſe very ſlow, his body intenſely cold, himſelf fond of ſolitude, and averſe to motion, ſo as to lay for ſix or eight hours together on a chair, without even changing the poſture of his body: yet, notwithſtanding his ſituation, he did not neglect to try various remedies, and to conſult with ſeveral of the faculty, in order to free himſelf from ſuch a wretched ſtate of body; he took many medicines of different kinds to no purpoſe, followed the preſcriptions of regulars and quacks, and uſed the warm natural mineral bath, the common warm bath, cold bath, and ſea-bathing, without advantage. At length, being informed of the efficacy of the artificial medicated baths and fumigations, he entered upon a courſe of them, and by going night and morning through theſe operations, in four months time he was perfectly recovered.

CASE IV.

A Merchant of London, about thirty-four years of age, of a full and ſanguine habit of body, had been afflicted for a very conſiderable time with the moſt violent and torturing rheumatic pains, fixed on the joints of his fingers, hands, arms, thighs, legs, and feet, which at times were ſo great as to raiſe a fever, and confine him to his bed.

The beſt attendance, and the moſt probable remedies the common practice could afford, were uſed in vain; his diſorder gained ground greatly every day, his body became bent and contorted, the muſcles of his neck were ſo contracted as to draw his head very much downward, his joints began to ſwell, and the pains and fever to increaſe: in ſuch a ſtate he was recommended to the medicated baths and fumigations.

The cauſes of his unhappy ſituation were two; the firſt proceeded from a cold he took after exerciſe, which immediately brought on an obſtruction of perſpiration; the ſecond was the imprudent uſe of a cold bath, a remedy worſe than the diſeaſe.

In conſequence of the advice he had received, he went twice a day through a regular courſe of theſe operations, taking now and then ſome mild purgatives: the cure was begun with the application of emolient water and vapour baths, five degrees under the animal heat; and gentle friction, till the bulky particles of the obſtructed humours were reduced, and the diameters of the perſpiratory veſſels were enlarged. Aromatics and aſtringents then took place, with the pump, the ſaponaceous and ſpirituous frictions; and in two months time the patient became an healthy man, able to enjoy all the pleaſures of life.

CASE V.

A Young gentleman, about nineteen years of age, was recommended to the uſe of the medicated baths for total deprivation in the tenſions of one of his feet; it appeared entirely diſlocated in the ancle, where the muſcles, ſinews, and ligaments, were ſo amazingly relaxed that he could by no means put his foot to the ground. His ſtation in life enabled him to procure the beſt advice. The power of medicine, aſtringent fomentations, plaiſters, unctions, and the uſe of iron and wood machines, contrived by phyſicians and ſurgeons of eminence, had been long applied without ſucceſs: the patient and his friends were without hope, when they were adviſed to this meaſure; yet, by three months uſe of the medicated water-baths, vaporous and dry baths, moiſt and dry partial fumigations, ſpirituous, ſaponaceous, and dry frictions, he was perfectly cured, and continues in good health.

CASE VI.

A Captain of foot in the ſervice of the Eaſt India Company, about thirty years of age, having ſlept in damp ſheets, was ſuddenly taken with a ſwelling in his legs and belly, which gradually increaſed upwards, even to his face; and, in ſpite of the beſt advice and medicines, the diſorder terminated in an alarming deſperate dropſy, in which ſtate the gentlemen of the faculty who attended him, determined to tap him, as the only means to prolong his life: but, being adviſed to try the dry ſtove and bed, and other means recommended in theſe Caſes, and perſiſting in them five weeks, his complaints abated by degrees, and at the end of that time, he left the houſe in perfect health.

CHAP. VIII.

Of Tar-Water, and Lime-Water.

IT would be unpardonable to diſmiſs the ſubject of natural and artificial medical waters, without mentioning *tar-water* and *lime-water*, the former of which was a very few years ago in ſuch high reputation, and the latter being at preſent occaſionally preſcribed in a variety of diſorders.

The nature and efficacy of tar-water have been ſo fully diſcuſſed, and ſo highly celebrated, by a right reverend divine, that little can be added; nor are we ourſelves ſo ſanguine as to attribute to it all the virtues which that ingenious and humane writer ſo liberally aſcribes to it: and the declenſion of it's reputation ſince the publication of the Treatiſe to which we refer, has been ſo conſiderable, that we feel ourſelves fully juſtified in declaring, that though it may poſſibly be ſerviceable in ſome particular caſes, yet we are of opinion, that a general uſe of it, in the vaſt variety of diſorders for which it has been preſcribed, may be attended with very dangerous conſequences: we are not inclined to believe that an univerſal remedy for all diſeaſes hath ever yet been diſcovered, or that ſuch a diſcovery is at all likely to take place; nor are we convinced that tar-water is in the liſt of thoſe which have proved moſt ſerviceable in the various maladies which afflict the human body.

Yet we do not mean to aſſert that tar-water is devoid of all good qualities, and that it has in no caſe been beneficially uſed; on the contrary, we are convinced that in particular caſes, and under proper regulations, it may be adminiſtered to advantage: it is not againſt tar-water as a medicine, but as a panacea, that we contend.

In ſcorbutic and ſcrophulous caſes, it has undoubtedly afforded relief, but it muſt be uſed with caution in dry and aduſt habits; and patients, habitually coſtive, will require to have their bodies kept open by gentle laxatives, during a courſe of this water; nor will a few doſes of purging phyſic be improper, previous to entering upon it.

In conſumptive diſorders it has been alſo preſcribed, but we apprehend it will not be conſiſtent with the patient's ſafety to give it in ſuch caſes of this diſeaſe as are attended with fever or hectic heat, which it may probably increaſe, and the nauſea which it frequently occaſions, may alſo bring on a retching, and add to the inflammation.

In aſthmatic complaints it is ſaid to have produced very favourable effects, but the ſame caution ſeems neceſſary in preſcribing it for diſorders of this nature.

As a diſſolvent, it has been recommended as a remedy for the gravel and ſtone, and as a diuretic, in retention and ſuppreſſion of urine.

It has alſo been mentioned as an alterative in many chronic diſeaſes, ſuch as gout, rheumatiſm, and dropſy; and the doſe in moſt caſes, is from one half pint to three, in twenty-four hours.

To make tar-water.

Take of the beſt and pureſt Norway tar, four pounds—of ſpring water, two gallons. Pour the water on the tar, ſtir it well with a ſtrong ſtick; cover it cloſe and let it ſtand twenty-four hours, then pour it carefully off for uſe, taking great care not to diſturb it.

After the tar-water has ſtood the twenty-four hours, a ſcum riſes on it of an oily nature, and this being carefully taken off with a ſpoon, hath been recommended as a dreſſing on pledgets or doſſils of fine flax or lint, for old wounds or ulcers, occaſioned by ſcrophulous or ſcorbutic tumors; it has alſo been preſcribed as an unction in obſtinate pains and aches in the limbs, and contractions of the joints.

We have already had occaſion to mention lime-water in treating of various diſorders, in which it has been preſcribed, and in particular in conſumptive caſes, in gleets, in ſcrophulous diſorders, and in the gravel; and we muſt refer our readers to the ſeveral heads under which the nature and cure of theſe diſeaſes is pointed out for the application of this water: to what will be found in theſe chapters, a general caution may be added, to exerciſe great care and diſcretion in the adminiſtration of this aſtringent medicine, an over quantity of which injudiciouſly applied, may be productive of very diſagreeable conſequences.

We have in a former part of this work given the method of making lime-water from calcined ſea-ſhells, which is the ſtrongeſt and beſt, and of which two half pints may be ſubſtituted for three of common lime-water, the preparation of which is as follows.

On one pound of freſh burned quick lime, pour gradually two gallons of ſpring-water; ſtir the whole well together, let it ſtand perfectly undiſturbed twenty-four hours; at the end of that time, pour the liquor off carefully from the ſediment, and afterwards filter it through paper. It may be kept ſome time in bottles cloſely ſtopped.

BOOK IX.

Strictures on Quackery in general, and a candid Examination of ſeveral popular Medicines.

CHAP. I.

Of Quackery in general.

IT is not an eaſy matter to determine what mode of adminiſtering medicine comes within the deſcription of *quackery*; we can hardly extend it to all advertiſed remedies, becauſe in that caſe we muſt involve many preſcriptions of eminent and regular phyſicians, who, actuated by various motives, have communicated their diſcoveries to mankind in this way, or the fruits of whoſe labours in the invention and application of new medicines, have found their way into the world by accidental means without their concurrence.

There are alſo ſome medicines which have been reported to be ſo highly efficacious in the cure of particular diſorders, that the legiſlature have thought fit to pay the inventors or proprietors the price or reward of their ingenuity, and to publiſh the compoſitions and applications of theſe noſtrums for the general benefit of mankind.

But we do not apprehend that either of thoſe claſſes come properly under the denomination of quackery. Where the component parts of a medicine are publicly known, as well as the exact manner of preparing it, or where it comes forth ſanctioned by the name of a regular phyſician of known and approved abilities and integrity, however it is promulgated, or in whatever way the diſeaſed are ſupplied with it, we do not apprehend that in either caſe the medicine ought to be conſidered as quackery, or that it's value is at all leſſened by being vended at ſuch a price as renders it attainable by the afflicted in every ſtation of life or degree of circumſtances.

But in our opinion, thoſe are properly termed quack medicines, which are either advertiſed under fictitious names, or anonymouſly; thoſe of which the compoſition is unknown, and the compounders and venders of which are either ignorant pretenders to medical knowledge, or men in ſituations and profeſſions of life, totally remote from the profeſſion of phyſic..

Under the burden of medicines thus ſurreptitiouſly obtruded on the world, do the public at this moment groan; and not only the newſpapers and other periodical publications are filled with advertiſements recommending theſe doubtful compounds, but every corner of the ſtreets is furniſhed with diſtributors, who load the paſſengers with pamphlets and hand-bills, promiſing in the ſtrongeſt terms of aſſertion infallible relief to the diſeaſed in all caſes, and inviting them to ſwallow the ſame remedy for the cure of diſorders ſo different in their natures as to make it obvious on a moment's reflection to all but the groſsly ignorant, to whom indeed theſe deluſive applications are particularly directed, that the uſe of them muſt be wholly inefficacious in all diſeaſes, or extremely dangerous in many; yet ſuch is the credulity of mankind, that they ſuffer themſelves to be duped by ſuch bare-faced artifices; and depending on a catalogue of pretended cures, into the truth or authenticity of which they never give themſelves the trouble to enquire, they add to the number of the deceived, and without regard to habit, conſtitution, age, or ſex, doſe themſelves with pills, potions, and powders, merely on the credit of theſe fabricated atteſtations; and at the expence of their healths, and to the danger of their lives, miniſter to the fraud and avarice of thoſe retailers of poiſon, the profits of ſome of whom are ſo extravagant, as to ſupport them in the enormous expences of magnificent town-houſes and country villas, ſplendid equipages, trains of ſervants, and all the appendages of rank and fortune: though ſome of theſe ſelf-created doctors are ſelected from the loweſt of the people; and we are credibly informed, that one in particular now flouriſhes in this metropolis, and ſits at eaſe in his own carriage, who a very few years ago was worthily employed in driving one of thoſe which ply in the ſtreets for the convenience of the public.

But theſe compounders of drugs are not content with advertiſing their miſerable inventions in newſpapers, handbills, and pamphlets; volumes are daily obtruded on the public which many of the nominal authors are unable to read, and the pens of numerous garretteers are daily employed to extol the compoſitions and celebrate the virtues of theſe ſpurious medicines, and to perſuade the deluded multitude that the moſt dangerous diſeaſes may be removed, and the moſt deſperate caſes relieved, by theſe balſams of health, each of which, according to the pompous accounts of thoſe hireling eulogiſts, poſſeſſes all the powers of the whole *materia medica*, and is alone ſufficient to prolong the human life in ſtrength and vigour to a period of years beyond that which hath been allotted to the race of man.

Nor does the evil ſtop here: fraud is committed upon fraud; the wrappers and ſeals, of the moſt ſaleable of theſe noſtrums, and even the hand-writing of the ſignatures purporting to be the proprietors names, are imitated, and a ſet of wretches, one degree worſe than the former, without the ſmalleſt knowledge of the compoſitions they mean to vend, ſubſtitute others of the cheapeſt ingredients they can procure, and without the leaſt regard to the diſeaſes which they pretend to cure, fill theſe papers of directions with drugs diametrically oppoſite in quality to thoſe they were intended to cover; and confounding all diſtinction of medicines, apply them as chance directs. We are ſorry to add, that ſhops of reputation are to be found, baſe enough to participate in theſe practices of infamy, and to ſhare in the price of their fellow-creatures deſtruction.

That evils of ſuch magnitude ſhould be ſuffered to paſs unnoticed, and that the lives of ſuch numbers of the moſt uſeful members of ſociety ſhould be ſuffered to be thus trifled with or ſported away, without the interpoſition of a legiſlature, in moſt other inſtances equally careful of property and life; who have with the utmoſt wiſdom and humanity framed and enacted laws, enforcing the ſevereſt puniſhments, attended with additional circumſtances of ſeverity and ſolemnity, on thoſe who lay violent hands on their fellow-citizens, and yet permit poiſon, in a thouſand forms, to be daily adminiſtered without check or controul, and health to be undermined under the ſpecious pretext of removing diſorders which theſe miſapplied medicines ſerve only to aggravate; and that no benevolent member of the great councils of the nation, ſhould turn his attention to an object of ſuch importance, is ſufficient to excite our wonder and aſtoniſhment: and ſtill more ſurprizing is it, that the learned body to whom the practice of phyſic is legally committed, and whoſe abilities are as extenſive as the powers with which they are inveſted, ſhould ſuffer ſuch enormities to proceed without their intervention, either by an application to parliament to ſtop the progreſs of ſuch alarming practices, or by expoſing the compoſition and effects of the ſeveral quack medicines offered to the public; detecting the falſity of the pretended accounts of cures performed by them, and exhibiting catalogues of the injuries ſuſtained by thoſe numerous individuals, whoſe lives have been deſtroyed or rendered comfortleſs by this unwarrantable traffic. Surely, the univerſal ſilence of the faculty on theſe momentous concerns, ſeems to countenance an inſinuation which we are well perſuaded is wholly unjuſt, that the regular profeſſors of phyſic are intereſted in the diſſemination of theſe ſpurious noſtrums, the ſuppreſſion of which would leſſen the progreſs of diſeaſe, and of courſe diminiſh the number of patients who are ultimately compelled to ſeek relief from them, for the diſorders brought on by quacks, empiricks, and mountebanks.

If we might venture to offer a few hints on a ſubject apparently ſo conſequential, we would ſubmit to the legiſlature the propriety of erecting a public board, compoſed of the moſt eminent phyſicians, for the examination, analyzation, and approbation, of every new medicine, before an advertiſement ſhould be admitted into any newſpaper or other periodical publication, and before it ſhould be vended in any manner whatſoever.

To this board, all perſons who had any ſuppoſed medical improvement to offer ſhould apply, and ſtate on oath the ingredients and compoſition of the propoſed medicine, and the diſorders to which it is meant to be applied; and if, after due deliberation and conſideration, the members of the board ſhould be of opinion that it may probably produce the propoſed effects, they ſhould immediately underwrite ſuch opinion on the advertiſements intended to be publiſhed, and under that ſanction the medicine ſhould be publicly ſold.

But if the phyſicians who compoſe this board ſhould determine that the compoſition offered to their examination is unfit or inadequate to the ends propoſed, and that it is either unſafe or improper to permit the general uſe of it; in ſuch caſes, they ſhould deliver to the inventor or propoſer their reaſons in writing for their refuſal to licence the publication and ſale, and a certificate purporting their having analyzed the medicine, and deſcribing the ingredients of which it is compoſed, and the manner of preparation; after which the proprietor of ſuch medicine might be at liberty to promulgate his invention in any manner he might think fit, provided every advertiſement, hand-bill, or other publication, contained an exact copy of the reaſons and certificate of the examining board.

That the ſame board ſhould carefully examine into the truth of all caſes and atteſtations of cures publiſhed in ſupport of any advertiſed medicine; and in caſe any of them ſhould be diſcovered to be fraudulently fabricated, to declare the ſame by public advertiſement, in order to prevent the continuance of the impoſition.

And to defray the expences which would neceſſarily attend ſuch inveſtigations, a ſmall fee might be paid with each medicine and preſcription ſubmitted to theſe examiners, the amount of which might be applied to ſuch purpoſes only; as it cannot be doubted but that the members of the College of Phyſicians would be happy to execute an office ſo eſſential to the public benefit, without the ſmalleſt view of private emolument.

But we are well aware that the plan we have propoſed is extremely imperfect, and that the execution of it in it's preſent form would be attended with many difficulties;

we can only plead in excuſe for offering it, our zeal to remedy an increaſing evil, and our hope that our humble attempt may induce ſome much abler writer, to ſuggeſt one better calculated to anſwer the important end for which it is deſigned.

Actuated by the ſame motives, we have in the following chapters offered our opinion with freedom on ſome of the moſt notorious popular medicines at preſent expoſed to public ſale in this metropolis: in doing which, as we had no private intereſt or reſentment to gratify, our praiſe or cenſure has been preciſely the reſult of our judgment or experience; we have examined the accounts which have been publiſhed of them, and the caſes adduced in ſupport of their efficacy, with the moſt unprejudiced candour, and have rejected no evidence that could be found in favour of all or any of them. It would give us the ſincereſt pleaſure to declare, that we thought them all equally intitled to our approbation, and that the adminiſtration of each of them was equally unattended with danger; but on ſuch a ſubject, it is abſolutely neceſſary to ſpeak without reſerve, nor will any degree of delicacy be juſtifiable.

CHAP. II.

Daffy's Elixir.

THIS is unqueſtionably an innocent medicine, and may in many inſtances be adminiſtred with advantage. The following is ſaid to be the compoſition of it.

> Take of raiſins of the ſun ſtoned, half a pound—of the leaves of ſenna, ſix ounces—of carraway ſeeds bruiſed, two ounces—Infuſe theſe ingredients a month in two quarts of French brandy, then ſtrain it off carefully, and bottle it for uſe.

Simple as the compoſition of this medicine is, it has been extolled for the cure of an infinite number of diſeaſes; and the venders of it, in the true ſpirit of quackery, inform the public that it exceeds all others, and has received the approbation and ſanction of many eminent phyſicians.

The bills which are diſperſed to promote the ſale of Daffy's Elixir, recommend it to all perſons afflicted with chronic diſeaſes, and in particular gout, ſtone, gravel, ulcers in the kidnies, colic, phthiſic, dropſy, ſcurvy, hypochondria, green ſickneſs, conſumption, want of digeſtion, agues, and piles.

It is alſo aſſerted, under the ſame authority, to be ſerviceable in moſt diſorders which affect children, ſuch as wind and crudities occaſioned by ill digeſtion, gripes, worms, rickets, ſtone, convulſions, and king's evil.

It is directed to be taken night and morning by way of purge, in ſuch quantities as age, conſtitution, habit, and other circumſtances may preſcribe, from a tea-ſpoonful in infancy, to three table-ſpoonfuls for grown perſons; though it is ſaid to be adviſeable to begin with ſmall doſes, and increaſe them by degrees at every repetition; confinement is not required, yet the patient is ordered to work off this phyſic with gruel or broth.

Having given the preſcription from which this medicine is prepared, it is unneceſſary to ſay that it may be ſafely adminiſtered as an innocent and inoffenſive purge, in coſtive habits, and in moſt caſes where laxatives of a more cooling nature are not required.

C H A P. III.

Dr. James's Powder.

THIS Powder, though advertiſed for ſale, and therefore coming properly within the deſcription of popular medicines, being the invention of a regular phyſician, can by no means be claſſed with the noſtrums of quacks.

It has been juſtly celebrated for ſeveral years paſt, and has been adminiſtered in a variety of caſes, both by the inventor himſelf and others, with ſuch a degree of ſucceſs as to eſtabliſh it's reputation beyond the poſſibility of doubt.

This medicine is a preparation of antimony, differing perhaps from the fever powders of the Edinburgh and London diſpenſatories, in the degree of activity acquired by ſome particular proceſs, either in preparing the ſeparate ingredients or combining them; for when either of the laſt-named medicines have been ſubſtituted for the genuine powder of Dr. James, it has either failed to operate at all, or has affected the patient in ſuch a degree only, as to produce few or none of the happy conſequences which have ſo often taken place from the adminiſtration of the medicine now under our conſideration.

But that our readers may be enabled to form ſome judgment of the nature of this medicine, though the particular manner of preparing it remains with the repreſentatives of the original inventor, we ſhall preſent them with the form of the fever powder of the London Diſpenſatory.

> Take of prepared crab's eyes, three ſcruples—of emetic tartar, two grains. Mix theſe powders carefully in a mortar.

But we do not offer this preſcription to ſupply the place of James's powder, which we have no ſcruple to admit is highly preferable whenever it can be procured, a preference which we are induced to allow to this powder, from a perfect conviction of it's ſuperior efficacy in many caſes, though perhaps we may not concur in preſcribing it ſo univerſally as the inventor himſelf, whoſe ſanguine opinion of it's extenſive and prevalent virtues, may probably be juſtified by greater experience of it than can fall to the ſhare of any other ſingle phyſician.

The diſeaſes for which it has been particularly recommended by Dr. James himſelf, are fevers, ſmall-pox, meaſles, ſlow fevers, nervous diſorders, the yellow fever, the head-ache, the rheumatiſm, the ague, colds, and conſumptions.

The very ancient method of treating fevers, when the practitioner depended on warm cordials, juleps, confections, and ſweating medicines, and ſeldom ventured to bleed, and ſcarcely ever to purge and vomit, hath been very juſtly exploded by the father of modern phyſic, whoſe practice hath not only been adapted by the phyſicians of the preſent day, but hath received very conſiderable improvement from the certain and invariable ſucceſs of theſe evacuations in many feveriſh caſes, which hath encouraged the practitioners in phyſic to extend them to ſome in which they have formerly been avoided, as pregnant with the moſt dangerous conſequences.

The truth is, that attempts to excite additional heat in the human body, already inflamed by diſeaſe beyond the degree of warmth neceſſary to concoct the humours which occaſioned the fever, appear ſo extravagantly abſurd, that it ſeems aſtoniſhing ſuch meaſures ſhould ever have been adopted by men who have evidently ſtudied the nature of diſeaſes, and acquired a degree of knowledge in their natures, ſymptoms, and effects.

The operation of this medicine is by vomit, ſtool, urine, and perſpiration; yet it does not often produce all, nor ſometimes, even when it acts efficaciouſly, any of theſe effects; and it ſeems to poſſeſs a peculiar and almoſt ſingular property of producing that effect only which the conſtitution, habit, and ſituation of the patient, renders him moſt capable of ſupporting.

In ſome caſes, indeed, this valuable medicine hath failed of ſucceſs, and thoſe in general have been frenzy fevers, or ſuch as have been attended with comatoſe or lethargic ſymptoms, in a very conſiderable degree, attended with great oppreſſion at the breaſt, and deep or difficult breathing.

But the very beſt account that can be given of the virtues, adminiſtration, and effects of theſe powders, will be deduced from the well-authenticated caſes which we have ſubjoined, and which have been ſelected from a great variety of others, equally ſupported by undoubted proofs, in order, as much as poſſible, to point out the uſe of this medicine in different diſeaſes.

We do not think it neceſſary to apologize for ſpeaking warmly in favour of this happy improvement in medicine; we think ourſelves fully juſtified in beſtowing upon it that praiſe which we cannot withold without manifeſt injuſtice, ſince we are fully authorized from our own experience, and the evidence of many candid and ingenious phyſicians, to declare that few compounded medicines have been found equal to James's powders, in removing fevers attended with the moſt alarming and dangerous ſymptoms, and in the moſt advanced and aggravated ſtates of theſe diſeaſes.

CASE I.

A Gentleman being on a viſit at Sir Neville Hickman's, at Bare-Hill, Berkſhire, was ſeized with a fever. In the firſt night it abated, but on the next day it returned with great violence. On the third day, an apothecary took away ſome blood, and on the fourth, a bliſter was laid on the patient's back. On the fifth day, he grew extremely ill, when a phyſician was called in, and about four or five days after, another; whoſe high reputation in their profeſſion will remove all manner of ſuſpicion that any thing was neglected which could contribute to the patient's recovery. During the week he was bled twice more in the arm, twice in the temporal artery, was cupped ſeveral times, once bled with leeches, had two more bliſters applied to the arms, two to the legs, one to the head, and two plaiſters to the feet. On Sunday, April 22, being the tenth day from the ſeizure, the patient was ſo extremely ill that the perſon who attended him went down ſtairs to Sir Neville Hickman, and told him he was dead; but upon his diſcovering ſome ſigns of life, Sir Neville made the attendants endeavour to force down a doſe of Dr. James's fever powder, of which about a third or fourth part was ſwallowed. On Monday and Tueſday, the 23d and 24th, the patient ſeemed much better, but the powder was not then repeated. On Wedneſday he relapſed, and on Thurſday was ſo ill that his phyſicians had not the leaſt hopes of his life. On that day, April 26, he took, for the ſecond time, a doſe of Dr. James's powder; and on Friday, April 27, was much better. This medicine was repeated; and, to the great ſurprize of almoſt every body, he continued to mend hourly, and in a few days perfectly recovered.

CASE II.

IN the beginning of November 1751, the Right Hon. the Lord Falkland being at Montauban, in France, viſited an Engliſh gentleman there, who was thought to be expiring of a fever, his phyſicians and friends having given up all hopes of his recovery. He had taken a great quantity of the bark, which, far from doing him ſervice, appeared to have been prejudicial to him. At this time he rattled in the throat, was very much delirious and inſenſible, and exceſſively hot and low. At ſeven in the morning Lord Falkland gave him half a paper of Dr. James's fever powder, which threw him into a profuſe ſweat. Two hours after, he took another half paper; in conſequence of which he brought up a large mouthful of very black bile, had ſome ſtools, and ſweated plentifully. Betwixt twelve and one he ſat up and ſpoke, and became ſenſible. At three he took a whole paper, and the medicine was repeated at proper intervals, according to the printed directions. In conſequence of this, he perfectly recovered from his diſorder, and in a few days regained his ſtrength.

CASE III.

MR. John Hearne, clerk to Mr. Madden, an inſurance broker, in Caſtle Alley, near the Royal Exchange, was at the Seſſions-houſe on Friday the 27th of April 1750, during the ſeſſions which proved ſo fatal, and remained there the whole day to hear the trials. On Thurſday, the 10th of May, he was ſeized with a violent fever, and was extremely convulſed and delirious till Wedneſday the 23d, when a prodigious number of ill-coloured ſpots appeared all over him, which never roſe above the ſurface of the ſkin. Many bliſters were applied to different parts, but without any good effect; and he was given over by every one. On Wedneſday, the 23d, about noon, he took ten grains of Dr. James's powder, and repeated it every ſix hours. About ſeven o'clock on Thurſday morning, the 24th, he began to ſleep, and ſlept three hours, and then awaked perfectly in his ſenſes, free from convulſions, and repeating the medicine, ſpeedily recovered. It was particularly remarkable in this caſe, that his bliſters, which were perfectly dry, began to run again profuſely, after taking four doſes of this powder.

CASE IV.

MR. Ruſſel, bookſeller, at Horace's head, without Temple Bar, mixed with the crowd to ſee the priſoners brought down on the 30th of April 1750, to receive ſentence. On Thurſday, the 10th of May, he was ſeized with a fever, attended with a delirium and ſtrong convulſions. Some few ſpots appeared upon him, but went in again, ſo as ſcarcely ever to be very perceptible; and upon the whole, he was ſo ill, that a phyſician of great eminence deſpaired of his life the firſt time he ſaw him. Wedneſday morning, the 23d of May, being the thirteenth day from the ſeizure, he took ten grains of Dr. James's fever powder, and repeated it every ſix hours. On Thurſday, the 24th, in the morning, he had ſlept and was remarkably better; he continued to take the powders that day and the next, mending every hour till his perfect recovery.

CASE V.

A Surgeon in the country was called to a girl about eighteen years of age, by her father, who told him that ſhe had loſt her ſpeech twenty-four hours; and he found ſhe had no perceptible pulſe, and could but juſt perceive her breathe, except ſometimes when ſhe fetched a deep ſigh; her eyes were fixed, and her extremities cold. In this deplorable ſituation, he endeavoured to get down ſome of Dr. James's fever powder, mixed with a little treacle. After ſeveral attempts, ſhe took the quantity of a quarter of a paper, and found that in half an hour ſhe grew warmer; he could juſt perceive a pulſation in the wriſt, and ſhe breathed with difficulty; ſoon after this ſhe moved her eyes, and in leſs than an hour puked once, and then aſked to drink. Some gruel was accordingly given to her, and half a paper more of powder; (her pulſe was at this time raiſed and quick.) After taking this doſe, ſhe fell aſleep, and a gentle ſweat enſued; and in about two hours ſhe awaked, had a ſtool, and brought away ſeveral worms of different ſizes. She complained of no pain, except in her belly. In this ſituation, the ſurgeon left her, with directions to her friends to give her a quarter of a paper of powder every ſix hours, to keep her from getting cold, and to give her gruel to drink. She took four doſes of the powder above-mentioned, and ſweated greatly for thirty hours, during which time ſhe had ſeveral fœtid ſtools, and brought off a very great number of worms, ſome dead, but moſt of them alive. From this time ſhe began to recover, and in three weeks was able to walk up a hill, which a difficulty of breathing for ſix months before, had prevented her from doing. The elixir proprietatis was then adminiſtered to her morning and evening, and ſhe was perfectly well in five weeks time.

CASE VI.

A Clergyman, near Lincoln, was deſired to viſit a ſhepherd in his pariſh, in order to read the departing prayer; and he went about ten in the morning, and found him lying ſpeechleſs, with his tongue hanging out of his mouth. Upon enquiry, his wife told him her huſband had loſt his ſenſes for five days laſt paſt. He was extremely hot, his tongue very clean, and of a good colour, and his pulſe regular, but very ſtrong: he had had no ſtool for eight or nine days; and a bliſter, which they had laid on five days before, did not riſe. The humane clergyman told his wife, if ſhe would be ſure to follow his directions, (for while the man was in his ſenſes about ten days before, he had refuſed to be blooded or take a vomit, as he had deſired) he did not doubt but that he could do him good by giving him ſome powders (meaning Dr. James's) which he had by him. She promiſed compliance, and he ordered her to give him a clyſter immediately, and apply a bliſter to his back and head. Two hours after the clergyman called again, and finding every thing done as he had ordered, and a large diſcharge by the clyſter, he gave the man half a paper of Dr. James's powder; but that having no viſible effect, he repeated it in an hour and a half. In an hour after this, he began to have convulſive twitchings, and to lift up his eyes, and ſhew great ſigns of death; but he ſoon began to vomit, and bring up ſlimy ſtuff, which was ſucceeded by three worms, one of which was upwards of a foot long. In ſhort, in three hours after taking the firſt half paper of powder, he ſat up in bed, was chearful, ſenſible, and eaſy. The next day he repeated the two doſes, and brought up two more worms, much like the other; and in four days after, his benefactor ſaw him in a market, ſeven miles from home, very well, ſelling ſheep.

It was very remarkable in this caſe, that before the giving of Dr. James's powders, the bliſters never roſe; but in a few hours after theſe were adminiſtered, they roſe very well.

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CASE VII.

THE ſervant of a clergyman of Wellin, Lincolnſhire, being at Bath with his maſter, the 15th of March 1752, was ſeized with the ſmall-pox, of a very mild and favourable ſort, which turned in the ſeventh day after the eruption, and went off in the moſt deſirable manner. But, about the ſecond day after the eruption, he was ſeized with a delirium or frenzy, which aroſe to ſuch a height, that he foamed at the mouth, refuſed all liquor, and endeavoured to bite the attendants. This made two eminent phyſicians that attended him, ſuſpect that beſides the ſmall-pox, he had that diſtemper which ariſes from the bite of a mad dog; for this reaſon they endeavoured to give him the Tonquin remedy, but could not get him to take it. When the ſmall-pox was entirely over, the delirium ſtill continuing in a violent manner, all proper meaſures were uſed to remove it, but in vain; and at laſt the phyſicians left him as incurable. In this ſtate, he took at once two whole papers of Dr. James's fever powder, after which he ſlept half an hour, and waked in violent ravings. The powders having no viſible effect, he took another whole paper two hours after the firſt; after which he ſlept again, and awaked in the ſame way. This paper likewiſe producing no effect, in two hours after he took a fourth whole paper, which in about half an hour operated by purging. His ravings after this grew leſs violent, and he eat and drank any thing they gave him. He continued taking the powders three times a day, for three or four days, after which cataplaſms were applied to his feet, as alſo a bliſter to his head; and upon taking the powders twice a day for a week more, he perfectly recovered both his ſenſes and his health.

CASE VIII.

A Poor woman, very big with child, and much fatigued by a long attendance on her huſband in a violent fever, was, December 7, taken ill of the ſame diſorder. The whole pleura, was greatly affected with ſtitches, and violent pains extended themſelves to the head, face, and neck. She loſt about thirty ounces of ſizy, dark-coloured blood, in the beginning; and in regard to her circumſtances, the cure was firſt attempted by nitrous and ſaline medicines, without any manner of effect. The danger became every day more imminent. December the 19th, the fever, which ſettled in her head, was attended with excruciating pains, violent heat, thirſt, and anxiety, and ſhe had been confined a week to her bed, in which time ſhe had not once ſlept. From the beginning ſhe had been importunate for James's powders, which ſaved her huſband's life. Accordingly, this night ſhe took about ſeven grains, which were repeated every ſix hours to a third time. The operation was very gentle. Next day, December 20, in the afternoon, the fever, with all it's ſymptoms, entirely left her: an happy event for herſelf and family; for at night labour-pains came on, and ſhe was in two hours delivered of a child at it's full time. She continued well, her condition conſidered, till December 23, when the ſymptomatic fever appeared. Her head was violently affected, and ſhe grew delirious. The powders were repeated, and the doſe increaſed, with a proper degree of caution, from ſeven to twelve grains. All complaints were ſoon removed; her milk was preſerved; ſhe gave ſuck to the child; and both remained perfectly well.

CASE IX.

ON Friday, the laſt day of December 1756, a child of twenty months old, (the ſon of a nobleman of the firſt rank) on ſuſpicion of the meaſles, was bled to five ounces, and no ſigns of inflammation appeared. On Saturday the 1ſt of January 1757, about five o'clock in the afternoon, the meaſles were viſible. On Sunday the 2d, they appeared full on his face and body. On Monday the 3d, they began to decline, and a hoarſeneſs, cough, and fever, came on. On Tueſday the 4th, in the morning, the puſtules had quite diſappeared, without leaving the leaſt redneſs, and the unfavourable ſymptoms increaſed. He was then again bled to five ounces, the blood ſhewing no ſigns of inflammation; and about three in the afternoon, the apothecary who attended him found more violent ſymptoms, ſuch as increaſed heat, wheezing cough, univerſal languor, and fluttering pulſe; on which he applied bliſters to the back and arms, and a phyſician was ſent for, who arrived about eight o'clock on Tueſday night, and found the fever very high and the cough violent. On Wedneſday morning the fifth, the ſymptoms rather abated; a clyſter was given him, and at three in the afternoon (at which time the fever was very violent) three ounces of blood were taken from him, which ſhewed no marks of inflammation. He bore this bleeding ſo very ill, that it was with great difficulty he was brought to himſelf: however, on his recovery from the faintings, he appeared relieved, and had a tolerable night. All Thurſday morning the 6th, he continued eaſy; but at three o'clock in the afternoon he was ſeized with great difficulty of breathing, and ſeemed in the utmoſt danger. Two bliſters were then applied to the legs; and as the caſe became doubtful, (notwithſtanding the phyſician had with great judgment preſcribed every thing that ſeemed proper in his caſe) the noble father of the infant deſired that Dr. James's powder might be given, and at the ſame time requeſted the attendance of the phyſician during the operation, to which he readily conſented, and gave the greateſt ſatisfaction by his particular care and attention. Accordingly, at five in the afternoon, four grains of Dr. James's powders were given, which in thirty-nine minutes vomited him briſkly for an hour, and gave him two ſtools. At nine o'clock three grains more were given; in twenty minutes he had one gentle puke, and went to ſleep. The pulſe growing quicker in four hours afterwards, which was one o'clock in the morning, he took four grains more, which immediately came up; he then vomited twice in an eaſy manner, had two ſtools, went to ſleep, but continued vomiting and purging gently, at diſtant intervals, till Friday morning at ſeven o'clock. On Friday morning the 7th, about three o'clock, the fever left him, and he continued free from it till nine at night, when his pulſe roſe a little. Between ten and eleven he took four grains more of the powder, which in forty minutes made him extremely ſick; he had ſeveral ſtrains for two hours, but never vomited.

Though his cough had been extremely troubleſome before, it was remarkable he never coughed once during the two hours of his ſickneſs: he then fell into a ſound pleaſant ſleep, and the fever left him.

On Saturday morning the 8th, about three o'clock, it was obſerved his breaſt had ſweated through his ſhirt and gown, after which he ſeemed greatly relieved in his breath and cough. About three in the afternoon, as he ſeemed free from the fever, a doſe of rhubarb was given him, and he remained free from diſorder, except a gentle cough.

CASE X.

A Man about thirty-five years of age, of a robuſt conſtitution, after a quarrel with his wife on the evening of May 31, 1769, mixed more than half an ounce of arſenic in a cup of ale, and drank it off. The poiſon ſoon began to affect him, and perceiving his danger, he in vain wiſhed for immediate aſſiſtance; for, as he lived four miles from a town, two hours were elapſed before he could be viſited by a ſurgeon, who found him complaining of a vehement pain and burning heat in his ſtomach and belly, an unquenchable thirſt, with almoſt inceſſant efforts to vomit and go to ſtool. His pulſe was full, and very quick; he ſometimes talked incoherently, and had twitchings of the tendons.

The ſurgeon ſeeing this unhappy man in ſo dangerous a ſituation, and conſidering the improbability of his recovery without ſome powerful remedy, and recollecting the good effects which Dr. James's powder had often produced, by it's quick action in cleanſing the firſt paſſages from bile, or any putrid irritating matter, he therefore reſolved to give him a pretty large doſe of it, hoping that it might ſpeedily evacuate the poiſon. Previous to it's uſe, twenty ounces of blood were taken away, and he then ſwallowed two-thirds of a paper of the powder in a ſpoonful of ſugar, drinking after it large draughts of warm water, in which bruiſed linſeed had been infuſed. For a few minutes a profuſion of bile was diſcharged, with ſome particles of the arſenic intermixed, as on examination could be plainly diſcovered; and he had preſently ſeveral mucous ſtools, with an appearance of blood in them. He now thought himſelf rather eaſier; but notwithſtanding the pain and other ill ſymptoms ſeemed to be ſomewhat mitigated by thoſe evacuations, they ſhortly began to increaſe with greater violence, ſo that he was hardly expected to live much longer; yet, as the laſt effort, half a paper more of the powder was adminiſtered, and ſoon after he fell into a profuſe ſweat. He again vomited up a vaſt quantity of bile, tinged with blood, which relieved him, and continued to evacuate by vomiting and by ſtools for more than four hours, till the liquids came up or paſſed through him unaltered. A gentle opiate was now given, to quiet, in ſome meaſure, the increaſed motion of the inteſtines, and repeated at proper intervals, as neceſſity required. He was ordered to take plentifully of good broth made of chicken or mutton, with ſago or panada for his food, till his exhauſted ſtrength ſhould be reſtored. Thus was this poor thoughtleſs man extricated from the moſt imminent degree of danger, and enabled in a few days to follow his uſual employment.

CASE XI.

IN the paſſage of an Eaſt-Indiaman from Bencoolen to China, a ſeaman, aged twenty-five years, of a robuſt conſtitution, was ſeized, July the 7th, 1772, with the ſymptoms of a violent fever. He was firſt taken with a ſhivering, which was ſucceeded by a ſevere pain in his back and head. His ſkin was hot, his tongue dry, his pulſe quick and very full, his breathing difficult, his eyes tinged with blood; he had been three days without a ſtool, was ſick, and inclined to vomit. He was firſt blooded and purged, and afterwards vomited, by drinking camomile tea. He was then put to bed, and ſweated freely, by the ſpirit of Mindererus and diluting drink. Theſe evacuations were repeated as occaſion required for ſix days, at the end of which time he was become comatoſe, and could not give a rational anſwer. A bliſter was then applied to his back, and cataplaſms to his feet; the common ſubſtitute for Dr. James's powder, viz. tartar emetic and crabs eyes, was adminiſtered; which gently vomited, purged, and ſweated him. This was repeated three days, but without the leaſt amendment: on the contrary, he now became ſo delirious that he got out of bed, and placed himſelf upon the forecaſtle, with an axe in his hand, ſwearing he would cleave any man that came near him. He was, however, ſecured, and tied down in bed; and in this ſituation the genuine Dr. James's powder was tried, at firſt for twenty-four hours in ſmall doſes, according to the printed directions for hot climates; but theſe producing no effect, and his recovery remaining very doubtful, a whole paper, or twenty grains, was adminiſtered. As this produced no operation, he took ten grains more an hour after, which gently vomited and purged, and threw him into a copious ſweat. Soon after he went into a profound ſleep, which continued for eight hours, though he had none for three days and nights before. He awoke perfectly in his ſenſes, ſaid he found himſelf very well, and begged to have ſomething to eat. After this the uſe of the powder was diſcontinued, and the bark was ordered, which ſoon reſtored him to his ſtrength.

CASE XII.

IN Auguſt 1773, a gentleman of Gray's Inn being attacked with a violent pain in his thigh, which, after a few days, flew up into his head and ſhoulders, applied to two of the moſt eminent phyſicians in London, who attended him at different intervals for near five months. During almoſt the whole of this time, by the violence of the complaint, his head and ſhoulders were contracted together; he had ſevere pains and ſwellings in his ancles and knees, and his body was bent almoſt double; ſo that he was unable to undreſs himſelf, or even to turn in his bed. It frequently happened, after he had lain down half an hour, that he became in a manner ſtupified; ſo that when he wanted any thing, he could not expreſs himſelf, and had been often obliged to be helped out of bed and ſeated in a chair, and to continue there all night.

On the 13th of January, 1774, after having repeatedly undergone the operations of cupping, bliſtering, and ſweating, and taking variety of medicines by order of the phyſicians, with very little or no benefit, he determined to leave off all phyſic, and to ſubmit to his diſorder as patiently as he could; and he remained in the ſame miſerable ſtate till the beginning of the ſummer, when, as the weather grew warm, he found himſelf conſiderably relieved. He was ſtill, however, never free from pain, and went to Scarborough in Auguſt, with an intention to drink the waters and bathe. After drinking the waters two or three mornings the complaint returned, principally affecting his left foot, ſo that he could not bear to put it to the ground. At this time he was adviſed by his friends to try Dr. James's powder; and ſeeing a gentleman (who had juſt publiſhed his remarkable caſe of nearly the ſame complaints) walking about healthy and well, the patient determined to apply to that medicine; though, from the common opinion that it was often attended with danger, he deferred taking it till he could have an opportunity of conſulting Dr. James himſelf. After remaining at Scarborough a ſhort time, he went to York, where he was confined ſeveral weeks, and was only able to go out twice in a chair. About the 20th of October, he reached London, and applied to Dr. James, who ordered five grains of his powder, every night, for a week, ſix grains for another week, and to continue it ſeven grains a night afterwards. He recommended for drink, at meals, Seltzer water, with a little hock or other white wine in it, and in other reſpects to live as uſual. The firſt doſe of the powder procured almoſt immediate relief, and he continued mending every day afterwards. The operation of the powder was that of keeping the body gently open, and occaſioning a perſpiration in the parts affected, which ſeemed in a manner to diſſolve the pain. The powder was purſued regularly for about a month or ſix weeks, when the patient finding himſelf tolerably recovered, ſaw Dr. James a ſecond time, who adviſed him to take two or three of his analeptic pills of a night, which in a few days effectually reſtored him, and he has been perfectly well ever ſince.

CASE XIII.

A Seaman, belonging to his majeſty's ſhip Levant, aged about twenty-three, was taken ill in June 1769, of a malignant petechial fever, which was at this time raging on board that ſhip, the infection having been taken at Porto Bello, in the Spaniſh Weſt Indies. The ſymptoms were at firſt a loſs of ſtrength and appetite; pulſe quick and ſmall, ſometimes hard; a violent head-ache; a nauſea and vomiting; ſtrong vibrations of the parotid arteries; a drumming in the ears; pains in the back and loins; eruptions on the neck and breaſt, and ſometimes all over the body, with an oppreſſion of the breaſt; a dry cough; the breath hot and offenſive; the extremities often cold; the face bloated; a raging delirium; the excrements green and fœtid; the eyes full and heavy, with a pain fixed in the bottom of them; a vomiting of bilious and fœtid matter; the tongue at firſt white, afterwards blue and diſcoloured. On the firſt day, ſix ounces of blood were taken away, and afterwards ſixteen grains of ipecacuanha were adminiſtered and two grains of emetic tartar in two ounces of mint water. It was worked off with camomile tea; after which he had three fine ſtools, by means of a clyſter compoſed of Glauber's ſalts, an ounce, and ſome water-gruel. At night he was ordered to take two ounces of the common ſaline draught, to be repeated every third hour On the ſecond day, he had not the leaſt remiſſion; but the ſymptoms in general worſe, the head-ache violent, and no ſleep. The following mixture was now ordered, four ſpoonfuls of which were to be taken every ſecond hour in the room of the ſaline draughts—Of the common emulſion, eight ounces; nitre, one dram; camphor, one ſcruple, diſſolved in two drams of French ſpirit. At night ſix grains of the compound powder of contrayerva was added, and the clyſter was ordered to be repeated. The third day produced no alteration; the fever much the ſame. A quarter of a grain of emetic tartar was now ordered every hour, with the ſaline mixture: it operated by ſtool, and ſcarcely any thing by ſweat. At night the fever grew worſe, and the patient was at intervals delirious. On the fourth day, all the ſymptoms of this dreadful diſorder were apparent; and the ſurgeon well knowing the rapid progreſs of diſeaſes in this country, and that the leaſt delay was death, ordered the uſe of all the medicines to be laid aſide, except the camphorated emulſion, and four grains of Dr. James's fever powder to be taken every hour. It had no viſible operation for the firſt four hours, but the fifth time of the patient's taking it, he vomited a great quantity of bilious matter, and had about a dozen fœtid ſtools; he ſweated profuſely, and the delirium ſeemed to give ground. The powder was now repeated every four hours. He ſlept about three hours this night. The fifth day, the delirium was quite gone; a fine remiſſion, all the ſymptoms much abated, and ſome of the worſt entirely vaniſhed. The powder and emulſion were continued all this day, and at night the ſymptoms were entirely off. As the patient was now very weak and low, one dram of the bark was ordered to be taken every hour in a glaſs of Madeira wine, and ſome of the ſame wine, diluted with ſaffron tea, for his common drink. He had no relapſe, and in ten days returned to his duty. During the time that his delirium laſted, and the coldneſs of the extremities, a cataplaſm of ſalt herrings, muſtard-ſeed, and vinegar, was applied, which ſeemed to be of uſe. In the ſame ſhip ſeventy men had the fever, all of whom took theſe powders, and only two died.

CASE XIV.

A Youth of nineteen, apprentice to a vintner in Covent Garden, contracted a fever at the Old Bailey in June 1748, being the ſame diſtemper of which the lord-mayor, judges, recorder, and many others died; and on Monday the 20th of that month, miliary eruptions began to appear on his arms, which the next day, Tueſday the 21ſt, diſappeared; and though he ſweated very much, his tongue became very dry, and he began to be delirious and convulſed; and on Friday the 24th, his tongue was black, dry, cracked, and ſore, and he was exceſſively delirious, perpetually muttering ſomething that could not be underſtood, and throwing off the bed-cloaths, could with difficulty be kept in bed, and was exceedingly convulſed all over. In this condition, about noon of that day, he took one full doſe of fever powder, which gave him five ſtools. At night his tongue began to be moiſt and red, and he ſpake more intelligibly; but yet was, at intervals, delirious. He took half a doſe more about nine, and it was repeated about four; but neither of theſe had any perceptible operation. On Saturday the 25th, about eleven in the morning, he took another whole doſe, which gave him three ſtools. At night his tongue was much more moiſt and red; he was more ſenſible, and his convulſions much leſs frequent and violent. That night he ſlept three hours, and ſweated very gently. On Sunday the 26th, by eleven in the morning, his convulſions entirely ceaſed, his tongue became red and moiſt, he was very ſenſible, and in every reſpect ſo well as to be thought out of danger. The next day he took a gentle purge, which was repeated two or three times, and he recovered perfectly in a very ſhort time.

Theſe medicines are directed to be adminiſtered under certain regulations, and after ſome preparation, of which we think it neceſſary to give the following ſuccinct account.

In ſtrong and robuſt conſtitutions, and where the patient is young, it will be prudent to take away ten or twelve ounces of blood, but this only in the beginning of a fever, and not after he has been reduced and exhauſted by the diſeaſe, when it might prove prejudicial. If the patient is coſtive, ſtools ſhould be procured previous to the adminiſtration of the powders, either by common clyſters, or by a tea-ſpoonful or two of lenitive electuary, half or three quarters of an ounce of purging ſalts, or from ten to twenty grains of rhubarb; but theſe doſes muſt be proportioned to the patient's habit, as it is only meant that his body ſhould be opened, and not that he ſhould be purged to any degree.

Each paper of the powder, of which there are two in every packet, contains about twenty grains; a third part, or one half of this quantity, according to circumſtances, is a doſe for a grown perſon, which is to be adminiſtered to the patient in bed, in a ſpoonful of currant-jelly, or other jelly of fruit, barley-water, gruel, or herb tea, particular caution being taken that no part of the medicine is left in the ſpoon: during the operation the patient is to be kept warm, and drink now and then a draught of warm gruel, barley-water, common whey, balm tea, or any other thin diluting liquor. If it produces any ſenſible operation, whether it be ſickneſs, purging, or ſweating, the medicine need not be repeated till the effect ceaſes, and then half or a third part of a paper, according to the caſe, is to be given in the ſame manner, and followed by the ſame management as before: if this ſecond doſe removes the feveriſh ſymptoms, and the patient ſleeps freely, it is not neceſſary to give a third doſe, the two will generally anſwer all the purpoſes intended; but if any remains of the fever appear, a third doſe, equal in quantity to the former, ſhould be adminiſtered, but not till the operation of the ſecond has entirely ceaſed; and the like doſes muſt be repeated till the deſired effect is produced.

But if the firſt doſe ſhould have no ſenſible operation, a ſecond ſhould be given two hours after the firſt; and if this ſhould produce no effect, two thirds of a paper, or even the whole contents of one, ſhould be given ſix hours after the ſecond doſe; and this quantity ſhould be repeated at diſtances of ſix or eight hours, till it acts by purging, vomiting, or ſweating, or the fever diſappears without either, which frequently happens; but the more plain and general direction is to give the half or third of a paper at firſt, and repeat the ſame quantity every ſix hours, till the feveriſh ſymptoms give way.

When it operates by purging, every poſſible precaution ſhould be uſed to prevent the danger of the patient's taking cold in uſing the bed pan, for it is by no means ſafe for him to be taken out of bed: but though this caution is abſolutely neceſſary after a medicine, which may be expected to excite a ſweat, yet it is by no means meant, that the patient ſhould be kept hot by a fire in his bed-room, or additional bed-cloaths; he ſhould only be defended from the air, and the covering be ſomewhat warmer than if he was in health.

If little or no putrid bile is contained in the ſtomach or bowels, it ſometimes happens that the largeſt doſes of the powder will have no ſenſible operation; and in theſe caſes, half a paper or even the whole, ſhould be repeated every four or ſix hours, as has been before directed. But on all ſuch occaſions, it is requiſite that a couple of ſtools ſhould be procured in the twenty-four hours, either by a clyſter, which is recommended as the beſt way, or by adding to every doſe of the powder occaſionally, ſo as to anſwer this purpoſe, from five to ten grains of rhubarb. Nor are we to conclude, that becauſe this medicine neither purges, vomits, or ſweats, it is therefore of no uſe, or prejudicial by it's retention in the body; it is ſaid frequently to produce a criſis, and cure the diſtemper, by the diſcharges of urine or inſenſible perſpiration: nay, the ingenious inventor of this medicine is of opinion, that it ſometimes acts ſo as to extinguiſh a fever by a ſpecific quality, which can only be diſcovered by experience.

When fevers are attended with purgings which are too violent, and yet cannot be ſtopped by opiates and aſtringents without danger, before the powder is adminiſtered a vomit of chicken-water is recommended, or a clyſter of the ſame, to be repeated every hour till the purging ceaſes, and then to give the powder.

This chicken-water, which is alſo directed to be taken as a diluting liquor during the operation of theſe medicines, is made by ſtripping a young lean chicken of it's feathers and ſkin, cutting it down the back, taking out the guts, and then, without waſhing it, boiling it eight minutes in ſeven quarts of water.

In caſe the body ſhould be coſtive during the adminiſtration of the powder, a ſtool muſt be procured every day by a common clyſter; but the utmoſt care muſt be taken that the patient is not expoſed to take cold in the performance of this operation.

If the head is much affected in a fever, and the patient is delirious, ſtupid, or convulſed, this powder is generally efficacious in the removal of theſe dangerous and very troubleſome ſymptoms; but in caſe the firſt or ſecond doſe ſhould fail to calm the patient, and carry off theſe complaints, the following ſtimulating cataplaſms are directed to be laid all over the feet, and renewed every ſix or eight hours till relief is btained.

Take equal parts of bruiſed muſtard-ſeed and horſe-radiſh ſcraped—a ſmall quantity of yeaſt, and enough of the ſharpeſt vinegar, to form theſe ingredients into a cataplaſm. At ſea, or where horſe-radiſh and yeaſt cannot be procured, a cataplaſm may be made of pickled herrings bruiſed, with freſh-made muſtard, and vinegar.

It is not neceſſary to repeat this medicine after a fever is removed, on account of any languor or weakneſs that may remain; theſe effects of illneſs will ſoon wear off, without any other medicine than a gentle laxative in caſe of coſtiveneſs.

The doſes muſt be proportioned to the different ages of children; three or four grains of it will be ſufficient for an infant of two or three years old; and this quantity muſt be either increaſed or decreaſed according to age

Dr. James left alſo another medicine, of ſomewhat ſimilar compoſition, under the name of *analeptic pills*, which are recommended for rheumatiſms, indigeſtion, crudities and flatulencies in the ſtomach and bowels, colics ariſing from any of theſe cauſes, bilious diſorders, loſs of appetite, and habitual coſtiveneſs: they are ſaid to act as a gentle purgative, and not to require confinement; and many inſtances are given of their efficacy, and in particular in rheumatic complaints.

CHAP. IV.

Of Norton's, or Maredant's, Antiſcorbutic Drops.

THESE drops, of which the ſale is ſaid to be immenſe, are probably an antimonial preparation of peculiar ſtrength and activity; but as it does not appear that the compoſition of this medicine is known, or that it hath been analyzed by the faculty, we ſhall not venture to offer our opinion of it.

They are vended, and ſaid to be prepared, by Mr. Norton, a ſurgeon, licenſed by the corporation of ſurgeons of London; according to whoſe account of them, they are effectual in eradicating the leproſy, ſcurvy, old ſores or ulcers, large blotches or boils, the king's evil, fiſtulas, piles, pimpled faces, long-continued inflammations of the eyes, bilious colic, Saint Anthony's fire, ſcorbutic gout and rheumatiſm, and all other diſorders ariſing from foulneſs of blood.

He likewiſe aſſerts that they perfect digeſtion, create an appetite, ſtrengthen the ſtomach, and act as reſtoratives to the moſt reduced conſtitutions.

Mr. Norton alſo informs the public, that theſe drops may be taken by thoſe of the moſt delicate conſtitutions, without the leaſt confinement or hindrance of buſineſs, and without any danger of catching cold; and that they may be adminiſtered with ſafety to infants, children, and women in a ſtate of pregnancy.

The proprietor alſo recommends them for the removal of ſuch diſorders as are the conſequence of inoculation, and for ſuch ulcers as have been of ſo long continuance as to affect the bones and endanger the limbs.

An infinite number of caſes are publiſhed in proof of the variety of virtues attributed to this medicine: and, indeed, if forty thouſand bottles of it are annually ſold, as is generally reported, it would be extraordinary if ſome of the patients ſhould not eſcape from their diſeaſes; and as it may be ſuppoſed thoſe who take this medicine are perſuaded of it's efficacy, it is natural to conceive, that ſuch of them as regain their health will aſcribe their recovery to the remedy in which they have placed their confidence.

But as we do not mean to inſinuate cenſure without proof, and are not furniſhed with any caſes in which this medicine has proved particularly prejudicial, we ſhall add a few of the caſes in favour of it, and leave our readers to form their own judgments.

CASE I.

A Youth having been ſeized with a moſt violent fever, a profuſe perſpiration, with a total loſs of appetite, ſucceeded it, which was followed by a number of very large ſwellings upon both legs, one thigh, and on his head, which after ſome time broke, and emitted a great quantity of matter, ſo that he was almoſt deprived of the uſe of both his legs. In this dangerous and emaciated condition, ſeveral of the faculty were applied to without benefit, and he was at laſt pronounced incurable. It was at length, however, determined to make trial of Norton's drops, as the laſt reſource, by which he obtained a perfect cure. It is above three years ſince he diſcontinued them, and he is now as ſound and healthy as he was previous to his indiſpoſition.

CASE II.

A Poor woman of Pendleton, near Mancheſter, Lancaſhire, was in a moſt miſerable emaciated condition, and ſo very lame that ſhe could ſcarcely move with the aſſiſtance of a crutch and ſtick; her lameneſs was occaſioned by a violent ſcrophulous diſorder in her right thigh, with which ſhe had been ſo afflicted for nine years, that her limb was contracted, and ſhe had ſixteen running ſores in it, which reduced her to that ſtate of weakneſs. For above a year ſhe was aſſiſted with every medicine, preſcribed by ſome very eminent of the faculty, without ſucceſs. Norton's drops were then adminiſtered, by which her health was reſtored, all her wounds perfectly healed, and her limb rendered as uſeful as the other. It is above two years ſince the cure was effected, ſo that ſhe is now able to maintain herſelf and children by weaving, her huſband being in the army at Jamaica.

CASE III.

A Woman had been long ſubject to the ſcurvy, which about two years ſince terminated in a violent eruption on her face and right-hand, attended with a running humour of a moſt fœtid ſmell. In this ſituation, ſo diſtreſſing to herſelf, and diſagreeable to her friends, ſhe conſulted two gentlemen eminent in their profeſſion, whoſe directions ſhe followed without the leaſt benefit. But being induced by cures advertiſed in the Saliſbury Journal, to try Norton's drops, from the firſt three or four bottles ſhe found relief; and by continuing them to nine, every diſagreeable ſymptom vaniſhed: ſince the cure (full ſixteen months) ſhe has been entirely free from any complaint, and now enjoys a perfect ſtate of health.

CHAP. V.

Of the Ormſkirk Medicine for the Cure of the Bites of Mad Dogs.

THIS medicine is ſaid to be the diſcovery of a Mr. Hill, of Ormſkirk in Lancaſhire, from whence it has obtained the name by which it is at preſent principally known.

The compoſition of this medicine has been hitherto kept a ſecret by the proprietors though it is apprehended to be ſomewhat ſimilar to the Tonquin or Chineſe preſcription, which we have given in a former part of this work.

Though it has in ſome inſtances failed of ſucceſs, (and particularly in a very melancholy caſe, which we have given at large, under the head of diſeaſes occaſioned by the bites of mad animals) yet, as the proprietors do not make any claim to infallibility, and as ſeveral caſes are adduced in proof of it's efficacy, we do not think the uſe of it ought to be neglected, more eſpecially as no medicine hath ever yet been offered to the public, which can be deemed a certain cure for this dreadful malady.

It is made up in proper doſes, one of which is to be taken in a tea-cupful of red wine and water, in the morning faſting; the patient is directed to remain without eating or drinking for three hours after taking the medicine, and then to live as uſual, avoiding all exceſs of liquor, for a fortnight or three weeks after.

The medicine ſhould be taken as ſoon as poſſible after the bite has been inflicted; and, where the injury is received in the hands or face, if it is adminiſtered within three days, and where other parts of the body have been bitten, within one week after the accident, one doſe is held to be ſufficient; but if any patient chuſes for farther ſafety to take a ſecond, it ſhould be given the third or fourth morning after the firſt; but if longer times have elapſed than thoſe we have juſt mentioned, if the wounds are large or deep, or the unfortunate patients have received more than one in different parts of their bodies, the repetition is ſaid to be abſolutely neceſſary, and even more than once, according to the diſtance of time, and the circumſtances of the wounds.

Children of three years old are directed to take half a paper as a doſe; from that age to eight, two thirds of a paper; and from thence upwards, the whole: and patients are adviſed not to bathe either in the ſea, or otherwiſe, for a fortnight after taking it.

This powder is aſſerted by the inventor and proprietors, to be perfectly innocent. It produces no ſenſible operation of any kind.

The caſes which the proprietors have publiſhed, in which theſe medicines have effected cures, after the ſymptoms of canine madneſs have actually appeared, are ſo few in number they are contained in the hand-bills, wherein theſe preparations are incloſed; yet as they appear to be well authenticated, we ſhall ſubjoin one of the moſt extraordinary, by way of information to ſuch of our readers as may be inclined to try the efficacy of the medicines, in caſe they ſhould have the dreadful misfortune of being bitten by a mad dog, or other animal in the ſame ſituation.

CASE.

A Woman ſervant, aged twenty-two, of an healthy conſtitution, in December 1767, was bit as ſhe returned from milking, by a dog which had every appearance of madneſs; her heel, where the wound was inflicted, became black and painful; but as ſhe was ſoon going to a new place, ſhe concealed the bite, leſt it ſhould be a prejudice to her. About a fortnight after ſhe got to it, and a month from the accident, on being told to take ſome milk off the fire (before which a dog lay) ſhe ſaid ſhe could not do it; and on being repeatedly urged to it, ſhe confeſſed the bite, and how much ſhe was now agitated at the ſight of a dog: this happened on Sunday; ſhe kept ſeemingly well till Thurſday morning early, when ſhe was ſeized with a violent giddineſs, and would have fallen, had not a man held her up for near half an hour; ſhe neither eat nor drank any thing that day or Friday, but concealed her diſorder from her miſtreſs till about eleven on Saturday morning, and then came to her, complaining exceedingly; ſaid ſhe felt as if ſhe could fly; was extremely thirſty, but could not drink; had been three times to the beck, or ſmall river near the houſe, but had come back without water: the pain in her head was intenſe, and her face red like ſcarlet; her eyes uncommonly fierce and diſtorted; ſhe was much agitated, and violently hot; ſat in every chair in the room, and roſe again immediately; ſhe then became quite delirious, and the conſternation of all about her was exceedingly great, as they were at a loſs what courſe to take. Some company coming to ſee her miſtreſs in the afternoon, ſhe burſt into the parlour and ſat herſelf down in a chair. Some one then recollecting that this medicine was kept for the uſe of the poor by a perſon in the town where ſhe lived, he was immediately ſent for, and ſhe was held in her place till he came. As ſhe had refuſed drink from the Thurſday before, and even coffee (of which ſhe was remarkably fond) it was with the utmoſt difficulty that the medicine was adminiſtered, her head ſtarting violently back when an attempt was made to give it; but by holding her head, and forcing it into her mouth, it was at length accompliſhed: ſhe was then put to bed, and held in it moſt part of the night; had water offered her, but ſhe would not drink, though ſhe complained of thirſt; her fleſh burned much, her eyes were fixed, but could bear no light; ſhe ſtarted frequently, and did not ſleep; but growing rather eaſier towards morning, had another paper of the medicine given her, which was taken with leſs difficulty; this brought on a pretty violent ſweat, and a ſhort ſleep, ever after which ſhe grew gradually better, her ſenſes returning ſo perfectly on Sunday afternoon, that riſing from her bed, and ſeeing a cake baking at the fire for the children, on which ſome aſhes had flown, ſhe called ſome one to blow them off, expreſſing her fears that her breath might hurt them; but had no remembrance of what had befallen her during the time of her delirium, only that ſhe was deſirous to do miſchief. She took no other medicine, food, phyſic, or diluting liquor; was neither bled, bliſtered, or had any other means uſed. The wildneſs in her eyes did not go off for near two months afterwards, but ſhe was in other reſpects well, and continued ſo.

CHAP. VI.

Of Ward's Drops, Pills, and other Medicines.

THESE medicines, during the life of the original proprietor, were ſo highly celebrated as to enable him not only to live in great ſplendor, and to amaſs a conſiderable fortune, but to exerciſe many acts of uncommon benevolence, and to aſſiſt the poor with money as well as drugs and advice; but whether the manners and converſation of Dr. Ward himſelf, added energy to his medicines, by contributing to the faith of thoſe to whom they were adminiſtered, or whether the manner of preparing them is leſs underſtood by his repreſentatives, or from whatever cauſe it ariſes, certain it is, that the fame of their efficacy has decreaſed very conſiderably ſince his death; and we apprehend, the profits on the ſale of them contributes but little at preſent, towards the ſupport of thoſe charities to which it is appropriated.

The *White Scurvy Drops*—one third part of an ounce of which are ſold for one ſhilling, are recommended in the diſorder from whence they take their name, and are ſaid to be excellent purifiers of the blood in all ſcorbutic caſes.

They are alſo preſcribed to bring off worms from children, and to remove obſtructions, particularly thoſe peculiar to the female ſex; to act as a cooling medicine in the diſeaſe called St. Anthony's fire, and other inflammatory complaints; and in removing pimples in the face, and other eruptions on the ſkin, in different parts of the body; and as an excellent anti-venereal in all ſtages of that diſeaſe.

When they are to be adminiſtered internally, two drops are directed to be put into a jill-glaſs, two third parts of which are to be filled with pump-water. This doſe is to be taken at bed-time, three ſucceſſive nights, then omitted three nights, and after that repeated again three nights; and this courſe is to be continued till the whole bottle is uſed. One drop is a child's doſe.

They are to be uſed externally, by wetting the top of the finger in them, and applying it once or twice to the part affected: and in the ſame way they are ſaid to cure the ſcurvy in the gums.

Theſe drops are avowedly a mercurial preparation, but are aſſerted not to contain more than half a grain of mercury, in the two drops ordered for a doſe.

The *Red Pills*—ſix of which are ſold for ſixpence, are directed to be adminiſtered to children and young people in the ſpring and fall of the year, to prevent worms, coughs, eruptions, and other diſorders, to which they are uſually ſubject, keeping them healthy by carrying off internal foulneſſes.

They are alſo highly extolled for rheumatic pains, and other aches in the limbs; for boils and ulcerous ſores; for obſtinate venereal diſeaſes; and in many other chronic caſes: they are directed to be taken for a conſiderable length of time in the following manner. Bruiſe a ſingle pill, and give it in a ſpoonful of any liquid, two or three times a week, in the morning, before any thing elſe is received into the ſtomach: it's operation is ſometimes by ſtool, and ſometimes by vomit, according to the nature and ſeat of the diſeaſe. In either of thoſe caſes, it ſhould be worked with thin water-gruel, or warm water, between each motion; if it excites perſpiration, the patient is to keep himſelf warm, and encourage it by diluting liquors. Milk, greens, and fruit, are to be avoided on the days when this medicine is taken.

This is an antimonial preparation; and, from it's viſible effects may be ſomewhat analagous to the London fever powder, or Dr. James's powder.

The *Emetic Sack-Drop*—at ſixpence for half an ounce, is recommended as efficacious in the ſame diſeaſes as the Red Drop; it is ſaid to bean eaſy and effectual vomit, and to operate in that way without exciting troubleſome and diſagreeable twitchings: the half ounce bottle is the doſe directed, to be leſſened according to age and other circumſtances; but it ſometimes acts as a purgative. When it vomits, half a pint of gruel or warm water may be given when the ſickneſs indicates an inclination to retch, and this may be repeated as often as the ſickneſs occurs.

The *Sweating Powders*—fifty grains for four-pence. Half this quantity is directed to be taken as a ſweat, which it is ſaid to excite in a very agreeable way, by eaſing the patient's pain, and raiſing his ſpirits, in all rheumatic caſes, pains in the body and limbs, in coughs, and other diſorders occaſioned by colds.

Theſe powders are ordered to be taken as the patient is going to bed, where he is to lie between the blankets, and drink frequently and moderately of white wine whey, or any other weak warm diluting liquor, and the ſweating is to be encouraged by warmth and lying ſtill. If the half paper does not raiſe a proper degree of perſpiration, three quarters or the whole contents of one may be given the ſucceeding night, and either of the doſes, as they appear to anſwer the purpoſe, may be repeated every other night, and continued either with the ſame or greater intervals, as long as ſhall be neceſſary, or they agree with the conſtitution.

The *Paſte for Fiſtulas and Piles*—is ſold in tin boxes, containing a pound each, at two ſhillings and ten pence. This paſte is ſaid to be highly efficacious in theſe diſorders, and others incident to the ſame parts of the body, and to be an antidote againſt the gravel, ſpleen, and internal ſoreneſs of the ſtomach or bowels.

The ſize of a nutmeg is to be taken three times a day, in the morning faſting, between breakfaſt and dinner, and at night, at proper diſtances from the meals, drinking after it a glaſs of wine and water, or water alone.

The *Liquid Sweat*—half an ounce for one ſhilling, is recommended for pains of the body or limbs, fevers, vomitings, gripes, complaints in the head, and female weakneſſes. The doſe is from ſixty to a hundred drops, taken in a glaſs of good white wine, and the patient is to lie between the blankets, and promote the ſweat by warm liquids; he is alſo cautioned to avoid the danger of getting cold, by going out too ſoon after this operation.

The *Dropſy Powders*—ſix papers in a parcel, for ſixpence. Theſe powders are ſaid to be not only ſerviceable in dropſical complaints, by cauſing an evacuation of the water in the belly, but to be uſeful in the jaundice, overflowing of bile, and retention of urine, promoting the paſſage of the water.

From thirty to forty grains are directed as a doſe to be taken in warm broth or beer, for two or three days together, or for a longer time, with proper intervals, according to the circumſtances of the caſe.

The *Eſſence for the Head-ache*—half an ounce one ſhilling. This eſſence, it is ſaid, was never ſold by Dr. Ward in his life-time; it is recommended in pains of the head, in which it is aſſerted to give immediate relief, and for continued aches in the limbs: a ſmall quantity of it is to be rubbed on the palm of the hand, which is then to be applied to the part affected, and held till it is dry; and this is to be repeated two, three, or four times, unleſs the pain is relieved by fewer applications. It was with this eſſence that Mr. Ward removed a violent fixed pain from the upper-joint of his late Majeſty's thumb.

From the reputation which theſe various medicines obtained, it is certain that they were in ſome caſes ſucceſsful under the adminiſtration of Mr. Ward himſelf; of late years they do not appear to have been in great uſe.

CHAP. VII.

Of the late Sir John Hill's Medicines.

THESE are chiefly prepared from vegetables; and if the botanical writings of the preparer of them have entitled him to reputation, it may be preſumed he would not forfeit it by obtruding on the world compoſitions different from the accounts given of them by himſelf, and warranted to be genuine.

It would exceed the bounds of our undertaking to enter into a minute diſcuſſion of the virtues and efficacy of theſe ſeveral medicines; all we can attempt is, to extract from the inventor's publications the natures of the ſeveral complaints for which he preſcribes them, and the manner in which he directs them to be adminiſtered.

Pectoral Balſam of Honey, for coughs and conſumptions, aſthmas, hoarſeneſs, defluctions, catarrhs, all phthiſicy complaints, difficulty of breathing, and a tough morning phlegm.—It is recommended as the greateſt of all preſervers of the lungs, and ſaid to poſſeſs the virtues of honey and the richeſt balſams, and never to diſagree with the ſtomach. A tea-ſpoonful is a doſe; to be taken morning and evening in a wine-glaſs of water. It is ſaid to convert the water into a pleaſant balſamic liquor, perfectly like aſſes milk in colour, taſte, and virtues; to be as reſtorative as aſſes milk, and to have the addition of this healing balſam. It may be taken at all times, to take off fever, recruit the ſtrength, raiſe and refreſh the ſpirits, clear all obſtructions of the breaſt and lungs, and to cure a common cold in a few hours. No particular rules of life are required, only weak perſons are to take ſmaller doſes; in all colds, warm weak liquors, drank in plenty, are recommended; to avoid ſuppers; and, in full habits, bleeding; in conſumptions, air, and exerciſe on horſeback.

Eſſence of Water-dock—It has been affirmed, that the water-dock root is an abſolute and certain cure for the ſcurvy; and the inventor of this medicine doubts if there ever was an inſtance, when it has been fairly tried, in which it failed. He ſays the great virtue of the root lies in it's inner rind, of which this eſſence is a perfect ſolution. A tea-ſpoonful is a ſufficient doſe; it is to be taken twice a-day in a wine-glaſs of water, or in an infuſion of the dock-root itſelf, where that can be had, which ſtill increaſes it's virtue. It muſt be continued for a conſiderable time, and the perſon is all the while to avoid high-ſeaſoned foods, and uſe moderate exerciſe.

Elixir of Bardana, for the gout and rheumatiſm.—The author does not pretend to prevent the returns of the gout; but to relieve thoſe who ſuffer, to reduce the number, and ſhorten the continuance of the fits, and to alleviate the pains of them, by this medicine. In the rheumatiſm it is recommended as a ſafe and abſolute cure; the doſe, a tea-ſpoonful, in a wine-glaſs of water, night and morning. It's operation is by perſpiration and urine.

The *Tincture of Centaury* is preſcribed as a great ſtomachic bitter, that gives a healthy appetite, and ſound digeſtion; ſtrengthens a weak ſtomach, prevents wind and ſwelling, and never fails to cure retchings, loathings, and ſickneſs after meals; to take off that faintneſs, weakneſs, and wearineſs, which proceeds from indigeſtion; and give in their place ſtrength, ſpirits, and chearfulneſs; to cure the heart-burn, dryneſs, and an ill taſte in the mouth, an offenſive breath, and riſing in the ſtomach after meals, heavineſs of the head, and fluſhings in the face.—The doſe is a tea-ſpoonful, to be taken an hour before dinner, and at night going to bed, in a wine-glaſs of water.

Genuine Tincture of Valerian, made from the true heath valerian-root, is deſcribed as a pleaſant, cordial, and enlivening medicine; good againſt all nervous diſorders, fits, head-aches, weakneſs, heavineſs, and lowneſs of ſpirits, dimneſs of ſight, vapours, and melancholy; convulſions and hyſteric complaints; epilepſies and paralytic diſorders; as alſo againſt ſickneſs of the ſtomach, and flatulencies; obſtructions, and the convulſive aſthma.—The doſe one table-ſpoonful in a large glaſs of water, once, twice, or three times a day. An hour before dinner, at ſeven in the evening, and at night going to bed; uſing exerciſe, and avoiding ſuppers.

Volatile Spirit of Feverfew—The doſe forty, fifty, or ſixty drops, in half a jill of water, twice a-day. The author recommends it to cure the moſt ſettled head-aches by a continued uſe, and to take off the pain in thoſe leſs fixed, in a few hours; againſt epilepſies, lax nerves, trembling, heavineſs, and ſlowneſs of ſpeech, with coldneſs of the limbs at ſome times, and tinglings of the fleſh at others; defect of memory, accompanying an habitual head-ache, with ſhiverings, faintings, and convulſions, eſpecially if advanced toward the decline of life; and blindneſs or deafneſs, which alſo ſometimes follow habitual kinds of head-aches. It is ſaid to be a medicine of power, and therefore the doſe ſhould not be increaſed; but may be repeated to three or even four times in the twenty-four hours, if there be urgent occaſion. Bleeding is always needful where there is fulneſs; it will be proper to purge once a week with any of the purging waters; and the patient is to uſe exerciſe, drink little wine, and avoid high foods, paſſions, or great ſtudy.

Carline Tincture, for a wandering gout, and for ſtrengthening the ſtomach and opening obſtructions.—A tea-ſpoonful in a wine-glaſs of water is a doſe; it is beſt taken with the breakfaſt, and with the afternoon's tea; is not at all unpleaſant, and the author ſays it prevents the ill effects of tea: and uſed thus in the morning, takes off any offenſive ſcent in the breath; and, by waſhing the mouth with it, with warm water, faſtens the teeth, and cures the ſcurvy in the gums. It is alſo ſaid to be ſtomachic and aromatic, good againſt wind, to deſtroy worms in children, and in the flying gout; and, though no aſtringent, cures dyſenteries.

Veronica, or *Speedwell Drops*, for ſtrengthening weakened conſtitutions, impaired by long illneſſes, hurt by too free living, or ariſing from ill-cured diſeaſes.—It is recommended to open gradually obſtructions of the internals; and reſtore them, ſo far as can be done, to their former tone and ſtrength. To aſſiſt weakneſs, anxiety, and pain, and raiſe the ſpirits, without heating the body; to relieve thoſe who have dry ſkins, with fluſhings in the cheeks; heat after meals, and ſudden ſweats; dry tongues, weak pulſe, and high-coloured urine; with weakneſs and waſting: no reliſh for food, nor refreſhment from ſleep; who have weakening diſcharges, deep coughs, and night ſweats. The doſe ordered is fifty drops, in a wine-glaſs of water; to be taken three times in the twenty-four hours:

laſt at night, with breakfaſt in the morning, and half an hour before dinner. The patient is adviſed to change the air, and drink cows, aſſes, or goats milk; to avoid high ſauces, reduce by degrees the quantity of ſtrong or fermented liquors he is uſed to drink; eat little ſupper, go early to bed, riſe betimes, and uſe exerciſe but not to fatigue; and never omit one doſe of the medicine during the courſe.

Balſamic Tincture of Agrimony, preſcribed to cure all degrees of the jaundice; the pale, the yellow, and the black: and other diſorders owing to a diſtempered ſtate of the liver, to overflowings of the gall, or to obſtructions, whether ariſing naturally, from ill-cured fevers, or great quantities of bark; to promote a regular formation of gall in the liver; and ſecure a due diſcharge of it into the inteſtines, and to take off that yellowneſs of the ſkin which remains after many diſtempers.—When the herb can be had in perfection, it may be made into tea: or the virtues may be doubled by taking the tincture in that infuſion. The doſe is a tea-ſpoonful night and morning, in a wine-glaſs of water, uſing exerciſe, and keeping the body open.

The *New Canadian Balſam*, or *Strengthening Drops*—They are perfectly innocent, not diſagreeable to the taſte; and are recommended to remove weakneſſes and exhauſting drains of all kinds, from whatever cauſe, and to ſtrengthen the ſtomach, the back, the weakened organs, and the whole conſtitution. The doſe is forty or fifty drops at night going to bed, and at twelve at noon in a glaſs of water. In ſome caſes the uſe of a cold bath is ſaid to be neceſſary to compleat a cure; but there are numerous inſtances where this medicine has done without that aſſiſtance.

Tincture of Sage, for thoſe who begin to feel the effect of years; for the cure of tremblings, difficulty of hearing, dimneſs of ſight, giddineſs, numbneſs, ſleepineſs, lowneſs of ſpirits, and thoſe other complaints which uſually attend an advanced life.—This is deſcribed as pleaſant, innocent, and effectual; and reported to continue health and ſpirits to the extreme of life; and to prevent thoſe ills, which too often would cut it off before it's time; to preſerve the faculties and memory; to warm the heart, ſtrengthen the ſtomach, and reſtore loſt appetite. It is alſo offered to prevent all the diſorders that attend a ſedentary habit; to relieve inſtantly, in faintings, and every kind of diſcompoſure, and in the head-ache; numbneſs of the limbs, hardneſs of hearing, dimneſs of ſight, giddineſs of the head, ſleepineſs, ſtiffneſs, and tremblings. The doſe is a tea-ſpoonful, twice a day, in a wine-glaſs of water, or of wine alone. It may alſo be taken in tea, whenever that is drank, or occaſionally on a lump of ſugar.

Red Speedwell Drops, for heats and redneſs in the face.—They are ſaid to be prepared from the herb, red ſpeedwell; aſſiſted and improved in virtue by whatever is moſt to be depended upon for the removing this troubleſome complaint: and are recommended as pleaſant, ſtomachic, aromatic, and reviving; being cordial without heat, and always giving relief in thoſe low ſpirits, which come on if the humour is at any time thrown back; to help the appetite and digeſtion; to prevent ſickneſs after meals; and to open obſtructions of the liver, which are often the real cauſes of heats in the face. They operate gently by urine, and are to be taken fifty drops in a wine-glaſs of water, at night going to bed; and the ſame an hour before dinner. The patient is directed to eat no bacon or ſalted meat; no muſtard, vinegar, or pepper; little ſpice, ſalt, and gravy; and to take weak wine and water as the common drink.

Eſſence of Reſtharrow, for the gravel and ſtone.—The bark of the freſh root is ſaid to contain all the virtue of the plant; and that thoſe who will take the pains to make a tea of it, will need no other preparation: only obſerving the great caution of having the root genuine; and that ſix drams of the bark of it is to make a quart of the tea. For thoſe who doubt, or cannot get the root, this eſſence is prepared: a tea-ſpoonful of it has the virtue of ſix drams of the freſh bark of reſtharrow; and if taken in a cup of barley-water, will have all the ſame effects, no more or leſs. A quart, or more, of barley-water, ſhould be drank at ſeveral draughts after it, that there may be the ſame diluting as with the tea; and the doſe may be repeated at eight hours diſtance. It is aſſerted to ſoften and cleanſe the paſſages, to cauſe a great and eaſy flow of urine, and bring down the gravel and ſmall ſtones with leſs pain.

American Balſam, for the colic—to ſtrengthen the ſtomach; open all obſtructions; to cure the rheumatiſm, gravel, colic, jaundice, and all kinds of weakneſſes; for the hypochondriacal diſeaſe; head-aches, coughs and conſumptions; for catarrhs, ſore throats, and aſthmas; hectics, and waſting of the fleſh; and for perſons who have lax fibres; to ſtrengthen the brain, aſſiſt the memory, and remove barrenneſs; and as a cure for lowneſs of ſpirits. The doſe is forty, fifty, or ſixty drops, in a tea-cup of water, at night, going to bed, and at twelve at noon.

Lettuce Juice, to ſerve the purpoſes of laudanum, without it's danger.—This juice, the author inſiſts, poſſeſſes the virtue of opium, but has not it's diſguſtful taſte, ill ſmell, or miſchievous effects; and that taken at night it gives reſt, in the day-time eaſe and chearfulneſs; that it eaſes pain, is good in diſorders of the ſtomach and bowels, and a ſafe and ready cure for common head-aches and low ſpirits. The doſe forty drops; but it may be increaſed to double that quantity; and may be taken twice a day in a wine-glaſs of water, or of wine. It may alſo be taken in tea.

Tincture of Spleenwort, for a cure of hypochondriacal diſorders.—The doſe a tea-ſpoonful in a wine-glaſs of water twice a day; two hours before dinner, and at night going to bed.

Tincture of Polypody, for a family purge.—A tea-ſpoonful in a glaſs of water is a doſe: it is ſaid to operate within an hour or two after taking; and that without the leaſt uneaſineſs, griping, or ſharpneſs. When the ſtomach is over filled, or any thing diſagrees with it, or when the bowels are ſwelled with wind, the pain is ſaid to ceaſe as ſoon as it is ſwallowed; and the cauſe to be preſently after removed, without trouble. It is alſo recommended in habitual coſtiveneſs; in cachectic and hypochondriacal caſes; in obſtructions of the meſentery; and to reduce corpulency. It's operation may be increaſed to any degree at pleaſure, by taking a larger doſe.

The *Worm Tincture*.—A few drops, taken once or twice a day, are preſcribed to deſtroy worms, and clear the bowels of that ſlime which gives them origin; and to ſtrengthen the ſtomach and inteſtines, ſo as to prevent more being produced. Four drops, in a ſpoonful of water, is the doſe for a child of two years old; and two drops more, in more water, for children every year older to ten: thoſe of ten years old may take twenty-five drops; and then add three drops to the doſe for every additional year to twenty; after which time, and for all grown perſons, ſixty or ſeventy drops are the proper quantity. A ſingle drop may be given to an infant in the month. It is to be continued for ſome time; and during the courſe a common purge is directed to be taken once in a week.

Liquid Extract of Hemlock, for cancers.—Twenty-five or thirty drops, are directed to be taken in a wine-glaſs of water, ſweetened with a ſmall lump of ſugar, at night going to bed, and at eleven in the morning; and to be increaſed to forty, or a few more, after ſome days continuance.

The body to be kept open by any gentle phyſic.

Alœdarian Drops, for diſorders of the ſtomach, and chronic diſeaſes; and for ſtrengthening broken conſtitutions, and ſoftening the decays of age.—To be taken from twenty to a hundred drops twice a day, in a wine-glaſs of water.

Petaſite Powder, for the cure of fevers.—It is ſold at three ſhillings the ſix papers. One paper is a doſe: it is to be taken at night, in a cup of baum or ſage tea; and, if there be occaſion, again in the morning, and at the night following. The author ſays, a ſlight fever, taken in time, is commonly cured by the firſt doſe: but where the caſe is more obſtinate, it is to be taken every eight hours. If the patient's ſtomach be oppreſſed or foul, a vomit is to be given in the beginning of the illneſs. If full of blood, he is to bleed. In all caſes he is to be put to bed, and kept perfectly quiet; and a baſon of baum or ſage tea taken every hour or two. No ſolid food is to be eaten, only panada, or the like. The body is to be kept open by a clyſter of water-gruel, with a little oil and coarſe ſugar, every morning. The air of the room to be often refreſhed, and the patient kept warm, but not covered too hot, or ſhut up too cloſe in the bed; the purpoſe being to keep up a gentle perſpiration, not a violent ſweat.

CHAP. VIII.

Of Dr. Anderſon's Scotch Pills, and Speediman's Pills.

THE former of theſe medicines is in general a ſafe, but ſomewhat rough purge; the principal ingredient in the compoſition of *Anderſon's Pills* being aloes.

The venders of theſe pills recommend them for diſeaſes of the ſtomach, head, and belly; to deſtroy worms in the inteſtines, to relieve habitual coſtiveneſs, and particularly of pregnant women; for thoſe pains in the head which proceed from vapours of the ſtomach; for blear eyes, conſtant thirſt, and paleneſs of countenance; for the ſtone, ſcurvy, colic, dropſy, green-ſickneſs, and paralytic complaints; for catarrhs, gout, rheumatiſm, and defluxions in the joints.

They are directed to be taken going to bed, though it is ſaid they may be uſed at any time: and the ordinary doſe is from two pills to four; though in weak conſtitutions, eaſy to work, a ſingle pill ſometimes anſwers the purpoſe.

In cold habits, theſe pills may be as uſeful as any other common purge; and as the quantities are determined, they may be a ſafe doſe for thoſe who do not conſult a medical practitioner on ſlight indiſpoſitions: but we cannot attribute to them all the virtues with which they are honoured by thoſe who are intereſted in their ſale; the utmoſt merit we can allow them is, that they may be beneficial to perſons of ſtrong conſtitutions, but ſhould be taken with caution by ſuch as are ſickly, weak, or infirm.

Speediman's Stomach Pills, are recommended for loſs of appetite, wind in the ſtomach, obſtructions in the bowels, heart-burn, palpitation of the heart, coſtiveneſs, colics, cramp, and vomitings; and one, two, or three of them are directed to be taken at any hour of the day or night.

They are alſo preſcribed as the beſt phyſic for ſuch gouty people as cannot bear exerciſe or cold purgatives, for removing the obſtructions of females, and at certain periods of their lives; for travellers, and ſuch as being ſubject to viciſſitudes of weather, are liable to diſorders in their ſtomach or bowels; it is alſo aſſerted, that no medicine procures ſleep ſo readily, or ſo effectually relieves the reſtleſſneſs occaſioned by a loaded ſtomach, or eaſes the bowels and ſtomach ſo ſoon after ſea-ſickneſs.

Theſe pills are alſo ſaid to be preventives of jaundice and dropſy, by producing good blood, and removing obſtructions; to have ſovereign power in relieving coſtive habits, and to be uſed with ſucceſs in windy ruptures.

But our readers will judge with how much truth this amazing catalogue of virtues is aſcribed to Speediman's pills, when we inform them, that they are a compoſition of powdered rhubarb and the flowers of camomile dried and powdered, the whole brought to a proper conſiſtency by the help of ſome ſyrup, or other viſcous fluid.

Nor by this account of the ingredients of which Speediman's pills conſiſt, do we mean to depreciate their value: we have no doubt but they are perfectly innocent; and that in ſlight diſorders of the ſtomach they are actually uſeful.

We have now noticed the principal medicines which are advertiſed for ſale, and which are therefore uſually deemed articles of quackery, though we have already given our reaſons for excepting ſome of them from this general charge; the vaſt variety of others with which the public is daily importuned to root out the very exiſtence of diſeaſe, are either common preſcriptions wrapt up in myſterious ſecreſy, or dangerous preparations of powerful drugs, unſkilfully compounded, and improperly proportioned: in the former caſe, ſhould any man apprehend himſelf benefitted, in all probability "His "faith hath made him whole;" in the latter, the patient and the diſeaſe go off together, and the patient's friends are conſoled with aſſurance that the cure would have been certain, if the application had not been too late; an apology which ſerves equally at every ſtage of indiſpoſition.

It would be deſcending too low, to mention thoſe itinerant phyſicians who vend their advice and their drugs in fairs, markets, and at the corners of ſtreets; who, ſcorning to depend on written teſtimonials, bring the ſame patients to atteſt the ſame cures a hundred times repeated; and modeſtly collect from the public contributions under the name of *charity*, for their mercenary band of pretended ſick, lame, and blind. Nor would any arguments we could offer have the ſmalleſt weight with thoſe whoſe credulity and ignorance can be duped by ſuch weak and ſhallow pretences; this is another of the medical grievances which requires the interpoſition of the legiſlature, which has annexed ignominy to the crime of ſelf-murder by poiſon, but ſuffers others to adminiſter it indiſcriminately, publicly, and with impunity.

BOOK

BOOK X.

Of ſudden and violent Accidents.

CHAP. I.

Of the Appearances of Death.

WHEN by any ſudden or violent accident the functions of life have been ſuſpended, and the human body has aſſumed the appearance of death, it has been too long the cuſtom to conſign it to the grave, without the ſmalleſt endeavour to call back the unhappy victim to life, or to reſtore the action of thoſe organs, which, though they are impaired to ſuch a degree as to be for a time imperceptible, may in many inſtances be awakened into motion, and a valuable life preſerved to the community at the expence of a very little trouble, and with the aſſiſtance of a very ſmall matter of medical, or rather of practical knowledge.

But the humanity and benevolence of the more enlightened phyſicians and medical practitioners and writers of the preſent age, have at length prevailed over the ſuperſtitious ſtupidity which oppoſed the efforts of reaſon and mercy; and inſtead of the churchyard or the charnel-houſe, the bodies of ſuch as meet with ſudden accidents, are now conveyed to warm beds, attended with care, zeal, and ſkill, and ſuch attempts made to prevent their misfortunes from being fatal, that ſcarce a day paſſes in which ſome unfortunate perſon is not ſnatched from the jaws of death, and reſtored to his family, his friends, and the commonwealth.

Nor have the moſt laudable endeavours been wanting to promulgate the means by which ends ſo deſirable may be attained; a ſociety at firſt inſtituted by the animated zeal of a private individual, has become ſo numerous and extenſive, as to eſtabliſh correſpondences with the learned, the liberal, and the ingenious, in every part of Great Britain, to form a general ſyſtem of œconomy for the preſervation of the human ſpecies from untimely death, and to confer honours and rewards on thoſe who ſhall aſſiſt in ſo meritorious a work.

Under the auſpices of this aſſociation, very emphatically denominated a *humane ſociety*, the recovery of the apparently dead has been attempted with ſurprizing ſucceſs; endeavours are uſed in the earlieſt moments that they can be applied, and continued whilſt even a poſſibility of hope remains; the fluids are prevented from growing cold, by baths, frictions, and coverings of warm cloths, ſand, aſhes, or ſalt; and endeavours are uſed to reanimate the organs of life, by introducing into the inteſtines and lungs air, ſmoke, and other ſtimulatives.

But, as a phyſician of another country has, with equal humanity and ability, pointed out the means which are moſt likely to contribute to the preſervation of life in a great variety of exigencies, we ſhall follow him as our principal guide in treating diſtinctly of theſe circumſtances, adding to his obſervations and directions, ſuch remarks as have occurred in the courſe of our own practice, and ſuch as we have been enabled to gather from the very ingenious writings of our own countrymen on this very intereſting and important ſubject.

CHAP. II.

Of Strangulation occaſioned by the Stoppage of the Paſſage into the Stomach.

MANY fatal accidents have ariſen from bodies of too large a ſize, or of pointed forms, and unequal ſurfaces, having paſſed into the gullet, and being detained there either by the narrowneſs of the paſſage, or by ſticking or adhering to the ſides of it: moſt of theſe accidents are occaſioned by careleſſneſs either in chewing animal food, fruit, or other hard ſubſtances; by haſte in feeding, eſpecially on fiſh, or the ſmaller kinds of fowl; by putting pins, needles, nails, and other pointed inſtruments, in the mouth; and above all, by talking in the act of eating ſuch dangerous food as we have already deſcribed, or with ſuch inſtruments in the mouth: we have ourſelves been witneſſes of ſudden death occaſioned by ſwallowing a nut-ſhell in the eagerneſs of anſwering a queſtion without clearing the mouth.

Plain directions, eaſily followed, would anſwer the purpoſe of obviating theſe dangers; let the meat be always well chewed, and this indeed is neceſſary to facilitate digeſtion, as well as to avoid ſtrangulation. Let no improper ſubſtances, or pointed inſtruments of any kind, be introduced into the mouth; let no attempt be made to ſpeak till the mouth is perfectly emptied; and let thoſe who have voracious appetites, or are particularly affected with hunger, avoid fiſh, and other food which contains ſmall and pointed bones: in England, fiſh is generally ſerved as the firſt diſh; and to thoſe whoſe appetites are keen, it is certainly a ſervice of ſome danger to attack it; the ſoup and boiled meat of other countries ſeem better calculated to allay the violence of hunger with ſafety.

But when, from neglect of theſe precautions, ſubſtances are actually fixed in the paſſages, ſpeedy means muſt be taken to remove them, which can only be done by extracting or forcing them down; the former is moſt adviſeable, but is not always practicable; whenever it is, it ought to be preferred to charging the ſtomach with a ſubſtance, which, in it's various paſſages, may produce inconvenience and danger in the inteſtines: if the paſſage is merely choaked by unchewed meat, the moſt expeditious method is, to thruſt it down, which may be done without heſitation, as no ill conſequence can happen from it; but if the ſtoppage is made by fiſh-bones, pins, needles, or other ſharp-pointed or uneven inſtruments of metal, wood, or other hard ſubſtance, every endeavour ſhould be uſed to extract them by the mouth.

To this end, the fingers ſhould be firſt tried; after theſe, nippers, or thoſe forceps which open in different diviſions, and are commonly uſed by ſurgeons to extract balls and other ſubſtances out of gun-ſhot wounds.

If theſe endeavours fail, which will frequently be the caſe if the ſtoppage is low in the gullet, and the matter which occaſions it is of a ſmooth or ſlippery ſurface; a kind of hooks or crotchets are recommended, which may be inſtantly formed of a piece of iron wire of proper ſtrength, bent at each end in contrary directions, the one end to be let down the throat with the flat of it towards the outſide or front of the neck, and the other curve to ſerve as a handle, and to be ſecured with a ſtring, to prevent the inſtrument itſelf from deſcending too low, and increaſing the miſchief it is intended to remove; when this hook is introduced, it muſt be carefully and judiciouſly raiſed and lowered till it lays hold of the offending ſubſtance, which it will in moſt caſes extract; for if it is a large body, and the crotchet once gets below it, it will certainly be raiſed; and if the obſtruction is occaſioned by a needle, pin, fiſh-bone, or other hard-pointed ſubſtance, ſticking acroſs the gullet, the inſtrument in it's return will ſeize it by the middle, and either break, bend, or diſengage it.

To extract leſſer bodies ſticking in or adhering to the ſides of the gullet, and not obſtructing the whole paſſage, another inſtrument is adviſed, compoſed alſo of a long piece of wire, the middle part of which is to be bent into a circle or ring about the ſize of the gullet; and the ſtraight ſides of the wire being brought together to ſerve as a handle, the ring may be introduced into the throat, and gently moved about till it lays hold of the obſtructing body. Rings for the like purpoſe may alſo be formed of leather, ſilk, or even packthread well waxed to ſtiffen it and give it a ſmooth ſurface; one of theſe may be faſtened to a piece of wire or whalebone, and then conveyed into the throat: and theſe flexible rings are in ſome caſes to be preferred to thoſe of wire, as a turn of the hand, after they have once laid hold of the ſubſtance, will effectually ſecure it, and enable the operator to move it in different directions, ſo as to extract it with leſs pain, danger, and difficulty. Several of theſe rings may alſo be uſed together, one being paſſed through the other in the manner of ſome watch-chains; and as they will in this caſe apply to all parts of the gullet, one of the rings may catch the obſtruction if the others miſs it.

On theſe occaſions ſponge may alſo be ſometimes uſed to great advantage; a ſmall piece ſwallowed perfectly dry, where the obſtructing ſubſtance does not wholly ſtop the paſſage, may be ſwelled by ſuffering the patient to get down a ſmall quantity of liquid, to ſuch a ſize as nearly to fill the gullet; and this being drawn up ſomewhat haſtily by a ſtring ſtrongly faſtened to it for the purpoſe, will hardly fail to remove the obſtruction, unleſs it is ſo ſharply pointed as to have penetrated deeply into the ſide of the paſſage.

Some authors have mentioned the compreſſibility of ſponge as a property which may be improved to advantage in accidents of this ſort, and have recommended the tying it cloſely about with a ſtring or piece of tape, ſo contrived that it may be unwound and drawn off after the ſponge has paſſed the obſtructed part of the gullet; but we apprehend this expedient will be attended with many difficulties, and that a piece of animal fleſh half-dreſſed and faſtened to a ſtring, will be ſwallowed and withdrawn with leſs abhorrence and inconvenience, and will in moſt caſes anſwer the purpoſe as well, if not better, than the ſponge.

In partial obſtructions, and where the danger does not ſeem to be emergent, emetics are often adminiſtered with great ſucceſs; but care ſhould be taken to aſcertain the nature of the obſtructing body; if it is only ſuch a ſubſtance as may be conceived to adhere to the ſides of the gullet, a vomit will generally bring it off; but if it is any ſharp inſtrument, or other rough and penetrating body, which may be ſuppoſed to be ſtuck or hooked into the ſides of the paſſage, the force of the emetic may rather aggravate the evil, and increaſe the danger. Whenever a vomit is thought adviſeable, and the obſtruction impedes the paſſage of liquids, to excite one, a clyſter may be adminiſtered of the water in which a proper quantity of tobacco has been boiled; and this ſeldom fails to produce ſtrong efforts to vomit.

In order to force obſtructing bodies into the ſtomach, a wax candle, rendered flexible by warmth, and the ſurface oiled, may be uſed; or pieces of whalebone, wire, or tough and bending wood, to either of which a bit of ſponge may be ſtrongly and ſecurely faſtened, to prevent the throat from being lacerated or hurt by the point of the inſtrument; and in all caſes of great emergency,

gency, and where delay may be attended with hazard of life, it will be right at all events to riſque the thruſting even pointed ſubſtances of metal into the ſtomach, from whence they may poſſibly paſs without occaſioning inconvenience, rather than to ſuffer the patient to remain in agonies of pain, or the extremity of danger.

During all the operations which we have recommended, either for the extracting or forcing down obſtructing bodies, the patient ſhould be directed to drink frequently of ſome emollient liquor, ſuch as warm milk and water, orgeat, thin water-gruel, or the like; if the paſſage is ſo far obſtructed as to render ſwallowing difficult or impoſſible, injections of the ſame kind ſhould be often thrown into the gullet by a crooked ſyringe, conſtructed to anſwer ſuch purpoſes; and this method may not only anſwer the end of ſoftening and lubricating the parts, and preventing inflammation, but may alſo in ſome caſes actually looſen the offending body, and facilitate it's extraction.

And in all caſes of difficulty, but which are unattended with immediate danger, after the ſeveral expedients which have been ſuggeſted have been tried without violence, but have proved ineffectual, it will be right to diſcontinue all endeavours, at leaſt for a time, as violent inflammations have been too frequently the conſequences of perſiſting in them eagerly; and the patient's life has been ſacrificed to attempts imprudently and incautiouſly made to recover him from a leſs dangerous ſituation.

And in theſe caſes, when all efforts have proved fruitleſs, and it is thought adviſeable to ſuſpend all manual operations, recourſe muſt be had to other means to prevent inflammatory diſorders, which ſuch obſtructions frequently bring on; and to this end bleeding, a low diet, and keeping the body open, are the moſt obvious meaſures; and to theſe may be added ſoftening poultices applied quite round the neck and frequently renewed, and gargles of an emollient and healing quality.

Exerciſe, and even violent motion, has ſometimes proved effectual, when other means have failed; the ſhaking of a horſe, or the rattling of a carriage over a pavement, have in ſome inſtances diſengaged ſharp bodies which have ſtuck in the throat; and blows on the back have ſometimes ſucceeded in the like caſes, but more commonly when any ſubſtance has got into the windpipe.

A regimen is neceſſary when any obſtructing matter has been forced into the ſtomach, leſt it's lodging there ſhould produce inflammations of the inteſtines; in ſuch a caſe, the diet ſhould be light, ſmooth, and liquid; and all ſtrong liquors, ſpices, and whatever elſe is of a heating nature, ſhould be avoided.

If the extraction, or forcing down the obſtruction, is attended with ſo much difficulty as to take up a great deal of time, and the throat is totally filled either by the ſubſtance ſwallowed, or the ſwelling and inflammation occaſioned by the irritation; clyſters of ſtrong broth, jellies, and other nouriſhing compoſitions, ſhould be frequently thrown up to ſuſtain life, till the inflammation can be got under, and other means tried, to afford more effectual relief.

The operation of bronchotomy, or opening the wind-pipe, is ſaid to have been tried with ſucceſs in ſome deſperate caſes; but as this muſt be performed by a very ſkilful ſurgeon, it is wholly unneceſſary to deſcribe it here.

CHAP.

CHAP. III.

Of Perſons whoſe apparent Deaths have been occaſioned by foul Air, noxious Vapours, or the Steams of Metals or Minerals.

AIR may become pernicious by a variety of means; it may be deprived of that active principle which tends to the preſervation of life, by paſſing through fire; or it may be impregnated with exhalations from putrid animal or vegetable bodies, ſulphur, mineral ſubſtances, or the like; the air of a room warmed by a charcoal fire, is well known to be extremely dangerous, though it does not ſeem to be determined whether the danger ariſes from a ſulphureous oil extracted from the charcoal, and diffuſed through the room, or from the more volatile particles of ſulphur itſelf diſſeminated in the ſame way.

The cleanſing deep wells, and entering vaults and other ſubterraneans which have been long ſhut up, is always attended with danger; the air of ſuch places ought to be previouſly purified by throwing in rockets of gunpowder and other combuſtibles; and theſe may alſo ſerve as experiments to aſcertain the ſafety of admitting workmen; for if they burn without obſtruction, no danger is to be apprehended: on the contrary, if they are immediately extinguiſhed, it would be extremely imprudent to let them venture till farther means have been tried to render the air leſs obnoxious. The like danger ariſes from exhalations of wine, cyder, beer, and other fermented liquors, which have been long pent up in cloſe cellars; and the ſame cautions are neceſſary before ſuch places are entered. The air in mines frequently proves fatal from being charged with large quantities of ſulphureous or mineral particles; and even that of rooms is rendered in ſome degree unwholeſome by many candles, and eſpecially when the flame of any of them is accidentally extinguiſhed, and the wick continues to burn. Lamps in bed-rooms are ſometimes productive of ill conſequences.

When on entering any of the places above pointed out, or any other place from whence the external air hath been excluded for any conſiderable length of time, the perſon finds himſelf oppreſſed and in danger of fainting, he ſhould inſtantly retreat and ſwallow a draught of any acid liquor warm, which will in all probability prevent any farther ill effects.

But if he is actually overpowered, and loſes his ſenſes and motion entirely, he ſhould be brought as ſpeedily as poſſible into pure and open air, where ſalts or ſtimulating fluids ſhould be held to his noſe; and a vein may be opened in the arm or neck. His extremities ſhould be put into a warm bath, and frictions uſed to the ſoles of his feet, ancles, and legs; as ſoon as he is capable of taking down a little liquid, ſome warm water acidulated with lemon-juice, vinegar, or ſweet ſpirit of nitre, ſhould be adminiſtered.

If the methods above-mentioned ſhould prove ineffectual, ſtimulating clyſters ſhould be thrown up, which may be compoſed of conſiderable quantities of buckthorn ſyrup and tincture of ſenna, even from one ounce to two of each, according to circumſtances; but if neither of theſe medicines can be readily procured, a common clyſter, with double the uſual portion of ſalt, may anſwer the purpoſe.

Other means may alſo be tried; ſuch as clyſters of tobacco-ſmoke, warmth, and the breath of another perſon blown into the mouth, and ſuch other attempts may be made to reſtore the circulation, as will be found under the various heads contained in this part of our work.

Inſtances have alſo been given of perſons who have been recovered from apparent death, occaſioned by noxious fumes or ſuffocations, by plunging the unfortunate patient into a cold bath; and this ſeems to be juſtified by the practice of the Italians, who conſtantly apply it to dogs, which, to gratify the curioſity of travellers, are thrown into the Grotto del Cani, and recovered by being immerſed in the neighbouring lake.

CHAP. IV.

Of apparent Death, occaſioned by extreme Cold.

THIS kind of death ſometimes happens in ſevere winters even in this climate, and is ſtill more common in thoſe northern regions to which the commerce of Great Britain frequently ſends the adventurous voyager; it will not therefore be improper to allow a few lines to the management and treatment of perſons at home and abroad who may be affected by the extremity of cold, either partially or generally.

When the blood in the ſmaller veſſels towards the ſurface of the body, and that even in the larger, at the extremities, is frozen or congealed; it will follow of courſe that from this defect of circulation, a larger portion of this fluid will be forced into the brain, and bring on at firſt a degree of ſleepineſs, and at length an univerſal torpor and apoplexy.

This effect of cold is ſo emphatically deſcribed in one of the voyages of that ingenious navigator, Captain Cooke, that we apprehend it may be uſeful to our readers, and particularly to ſuch of them as may have occaſion to viſit the colder countries, to tranſcribe the paſſages.

"Dr. Solander having often paſſed mountains in cold countries, was ſenſible that extreme cold, when joined with fatigue, occaſions a drowſineſs that is not eaſily reſiſted: he accordingly entreated his friends to keep in motion, however diſagreeable it might be to them; his words were, "Whoever ſits down will ſleep, and whoever ſleeps will wake no more." Every one ſeemed accordingly armed with reſolution; but of a ſudden the cold became ſo very intenſe as to threaten the moſt direful effects. It was very remarkable, that Dr. Solander himſelf, who had ſo forcibly admoniſhed and alarmed his party, ſhould be the firſt who inſiſted upon being ſuffered to repoſe: in ſpite of the moſt earneſt intreaties of his friends, he lay down amidſt the ſnow, and it was with great difficulty they could keep him awake. One of the black ſervants became alſo weary and faint, and was upon the point of following the Doctor's example; an officer was therefore detached with a party to make a fire on the firſt commodious ſpot they could meet with: Mr. Banks, with four more men, remained with the doctor and the black, who with the utmoſt difficulty were induced to come on; but when they had traverſed the greateſt part of the ſwamp, they expreſſed their inability of going any farther. When the black was informed, that if he remained there he would ſoon be frozen to death, he replied, he was ſo exhauſted that death would be a relief to him. Dr. Solander

" ſaid he was not unwilling to go, but he " muſt firſt take ſome ſleep, notwithſtanding what he had before declared to the " company. Thus reſolved, they both ſat " down, ſupported by buſhes, and in a " ſhort time fell aſleep. Intelligence now " arrived from the advanced party, that a " fire was kindled about a quarter of a mile " farther on the way. Mr. Banks then " waked the doctor, who had almoſt loſt " the uſe of his limbs already, though it " was but a few minutes ſince he ſat down; " he nevertheleſs conſented to go: every " meaſure to relieve the black proved ineffectual; he remained motionleſs, and " they were obliged to leave him to the " care of another black ſervant and a ſailor, " who appeared to have been the leaſt hurt " by the cold; and they were to be relieved as ſoon as two others were ſufficiently warmed to ſupply their places. " The doctor was with much difficulty got " to the fire."

After deſcribing the ſituation of the party who reached the fire, and the arrival of the ſailor who they had left with the two black ſervants, the narrative proceeds, as follows:

" Mr. Banks and four others proceeded " to ſeek for the two blacks; they found " Richmond (one of them) upon his legs, " but incapable of moving them; the other " black was lying ſenſeleſs upon the ground. " All endeavours to bring them to the fire " were fruitleſs, nor was it poſſible to kindle " one upon the ſpot, on account of the " ſnow that had fallen, and was ſtill falling; " ſo that there was no alternative, and they " were compelled to leave the two unfortunate negroes to their fate; making " them, however, a bed of boughs of trees, " and covering them very thick with the " ſame.

" As all hands had been employed in " endeavouring to move the two blacks to " the fire, and had therefore been expoſed " to the cold for near an hour and a half, " ſome of them began to be afflicted in the " ſame manner as thoſe they went to relieve. Briſcoe, another of Mr. Banks's " ſervants, in particular, began to loſe his " ſenſibility. They at length reached the " fire, and paſſed the night in a very diſagreeable manner."

The return of the morning afforded theſe curious adventurers but little hope of reaching their ſhip in ſafety, till the ſun began to burſt through the clouds, and invite them to make the attempt; but, " previous " to their ſetting out, meſſengers were diſpatched to the unhappy negroes, who " returned with the melancholy news of " their deaths."

But though in a ſituation where no other reſources were to be found, the approach to the fire was the only poſſible chance for ſaving life; yet, when other means are at hand, this is by no means adviſeable: when the extremities are ſo frozen or benumbed with cold as to loſe their ſenſibility and threaten the danger of mortification, ſudden heat increaſes that danger, and is therefore to be carefully avoided.

To reſtore vegetables and meat in this ſituation, the common and certain practice is to immerſe it in cold water; and every cook-maid will inform you, that the application of warm water or fire would immediately reduce it to a ſtate little ſhort of rottenneſs: living animals, and human bodies in the like ſituation, ſhould be treated in nearly the ſame way.

Rubbing the benumbed extremities with ſnow, hath been found to anſwer the ſame purpoſe as plunging it in cold water; but the friction ſhould be continued till the parts are reſtored to a degree of natural warmth, and recover the ſenſe of feeling: after this the patient may be admitted into a room ſomewhat warmer, and drink a diſh of tea, or other milk-warm diluting liquor, and the frictions ſhould be repeated, and all remains of the numbneſs removed, before he is ſuffered to come to the fire, or ſwallow any ſtrong liquor.

And even when from a continued expoſure to cold, the human body hath aſſumed a perfect appearance of death, and all the animal functions are totally ſuſpended. It ſhould be immediately placed in a bath of quite cold water, and afterwards rubbed with flannels, till the vital warmth returns; or if this is not poſſible, it ſhould be rubbed with ſnow, and treated in the ſame manner as we have already directed with reſpect to frozen limbs; and under both theſe methods of management, great hope may be entertained of preſerving life, though no remaining traces of it have been diſcoverable even for many hours.

CHAP. V.

Of Perſons apparently drowned.

WE are ſorry to notice an obſervation in an eminent and juſtly-admired writer, that, "When a perſon has remained "above a quarter of an hour under water, "there can be no conſiderable hopes of "his recovery." The aſſertions of an author of undoubted credit on ſuch a ſubject, may be apt to encourage a remiſſion of attempts; and many lives may be loſt, which, by a due perſeverance, grounded on neceſſary hope and confidence, might be preſerved to their friends and ſociety.

Inſtances occur frequently of perſons brought back to life after having laid under water more than twice the ſpace of time above-mentioned; and as it is impoſſible to limit the duration of time in which the vital ſpark may remain unextinguiſhed, we apprehend it can be attended with no inconvenience, and may poſſibly be productive of much good, to extend our endeavours to reſtore life to thoſe the time of whoſe immerſion is uncertain, and even to ſuch as have been known to have remained hours in that ſituation.

It is not our intention to offer any other inſtructions for the recovery of perſons in this melancholy ſituation, than ſuch as are promulgated by an aſſociation which has with infinite propriety been denominated the *Humane Society*. The plan of this ſociety, the methods they recommend, which appear to be truly judicious, and ſome caſes extracted from their annual reports, will finiſh this chapter.

But we cannot loſe this opportunity of exhorting our readers to contribute, as their conveniency permits, to the ſupport of this noble inſtitution; the founders and ſeveral members of which can have no other objects in view, than to reſcue individuals from untimely deaths, and their families from the diſtreſs which attends ſuch melancholy events; and to benefit ſociety by the preſervation of lives, every one of which is of weight in the great ſcale of national riches and ſtrength.

THE PLAN.

THE ſociety undertakes to publiſh, in as extenſive a manner as poſſible, the proper methods of treating perſons in thoſe unfortunate circumſtances.

To diſtribute a premium of two guineas among the firſt perſons, (not exceeding four in number) who will attempt to recover man, woman, or child, taken out of the water for dead, within thirty miles of the cities of London and Weſtminſter; provided they had not been longer than two hours under the water; and provided the aſſiſtants perſevere in the uſe of the means recommended, and no others, unleſs under the direction of a regular practitioner, for the ſpace of two hours. This reward to be given, though they may not prove ſucceſsful.

To diſtribute in like manner four guineas, wherever the patient has been reſtored to life.

To give to any publican, or other, who ſhall admit the body into his houſe without delay, and furniſh the neceſſary accommodations, one guinea; and to ſecure them from the charge of burial, in unſucceſsful caſes.

A certain number of medical gentlemen, reſident near the places where diſaſters by water are moſt frequent, have engaged to give their aſſiſtance gratis: theſe gentlemen are to have a fumigator, and other neceſſaries, always in readineſs.

METHODS OF TREATMENT.

IN removing the body to a convenient place, great care is to be taken that it be not bruiſed, ſhaken violently, roughly handled, or carried over any one's ſhoulders, with the head hanging downwards; nor is it to be rolled upon the ground, or over a barrel, nor lifted up by the heels; for all theſe methods are injurious, and often deſtroy the ſmall remains of life. The unfortunate object is to be cautiouſly conveyed in the arms of two or more perſons, or in a carriage upon ſtraw, lying, as on a bed, with the head a little raiſed, and kept in as natural and eaſy a poſition as poſſible.

The body, being well dried with a cloth, is to be placed in a bed or blanket properly warmed, but not too near a large fire. Bottles of hot water are then to be laid to the bottoms of the feet, in the joints of the knees, and under the arm-pits; and a warming-pan, moderately heated, or hot bricks wrapped in cloths, rubbed over the body, and particularly along the back. The natural and kindly warmth of a healthy perſon lying by the ſide of the body, particularly by that of a child, has been in many caſes very efficacious. The windows or door of the room, ſhould be left open, and no more perſons be admitted into it than thoſe who are abſolutely neceſſary, as the life of the patient greatly depends upon his having the benefit of pure air. The ſhirt or cloaths of an attendant, or the ſkin of a ſheep freſh killed, may alſo be uſed with advantage. When accidents of this kind happen in the neighbourhood of a warm bath, brew-houſe, bake-houſe, glaſs-houſe, ſaltern, ſoap manufactory, or any fabric where warm lees, aſhes, embers, grains, ſand, or water, can be eaſily procured, it will be very proper to place the body in any of theſe, moderated to a degree of heat but very little exceeding that of a healthy perſon.

The body being placed in one or other of theſe advantageous ſituations as ſpeedily as poſſible, various ſtimulating means are next to be employed. Thoſe recommended as moſt efficacious are, blowing with force into the lungs, by applying the mouth to that of the patient, cloſing at the ſame time his noſtrils with one hand, and gently expelling the air again by preſſing the cheſt with the other, imitating the ſtrong breathing of a healthy perſon; the medium of a handkerchief or cloth may be uſed to render the operation leſs indelicate. Throwing the ſmoke of tobacco from the fundament into the bowels, by means of a pipe or fumigator, ſuch as are uſed in adminiſtering clyſters; a pair of bellows may be employed until other inſtruments can be procured. Rubbing the belly, cheſt, back, and arms, with a coarſe cloth, or dry ſalt, ſo as not to rub off the ſkin; or with a flannel dipped in brandy, rum, or gin; applying ſpirits of hartſhorn, volatile ſalts, or any other ſtimulating ſubſtance, to the noſtrils, and rubbing them upon the temples very frequently; tickling the throat with a feather, ſo as to excite a propenſity to vomit; and the noſtrils alſo with a feather, ſnuff, or any other ſtimulant, to provoke ſneezing. The body ſhould at intervals be ſhaken and varied in it's poſition.

If any ſigns of returning life appear, ſuch as ſighing, gaſping, twitchings, or any other convulſive motions, beating of the heart, or the return of the natural colour and warmth, a ſpoonful of water may be adminiſtered, in order to learn whether the patient has regained the power of ſwallowing; if ſo, a ſpoonful or two of warm wine, or brandy and water, may be given with advantage, but not before, as the liquor might otherwiſe get into the lungs. Some of the above methods are to be perſevered in until the patient is reſtored.

Where the patient has lain but a ſhort time ſenſeleſs, blowing into the lungs or bowels has been in ſome caſes found ſufficient; yet a ſpeedy recovery is not to be expected in general. The above methods are therefore adviſed to be continued with ſpirit for two hours, or upwards, although there ſhould not in that time be the leaſt ſymptoms of returning life. The vulgar notion that a perſon will recover in a few minutes, or not at all, has moſt certainly cauſed the death of many who might otherwiſe have been ſaved.

Moſt of the above means are happily of ſuch a nature that they may be begun immediately, and that too by perſons unacquainted with the medical art; yet it is always adviſeable to ſeek the aſſiſtance of ſome regular practitioner as ſoon as poſſible, as it is to be preſumed that ſuch a one will be more ſkilful and expert, and better able to vary the methods of procedure, as circumſtances require.

The ſociety inform practitioners in general, that ſeveral caſes have fallen under their obſervation, in which early bleeding has been productive of pernicious and even fatal effects. They are therefore of opinion, that the opening of a veſſel ſhould not be placed among the common methods of treatment, or ſuch as are always applicable, although it may ſometimes be ſucceſsfully employed to remove ſubſequent ſymptoms of an inflammatory nature.

They alſo obſerve, that moſt of the above means of reſtoration are applicable to various other caſes of apparent deaths; whether from hanging, apoplectic and convulſive fits, cold, ſuffocation by damps or noxious vapours, proceeding from coal-mines, the confined air of wells, ciſterns, caves, or the muſt of fermenting liquors.

CASE I.

A Child of four years old, ſon to a private ſoldier in the Surry militia, fell from one of the wharfs at Rocheſter into the river Medway: after having continued above a quarter of an hour under water, the body was found, and laid on the ſhore, without any apparent remains of life, where it lay for a quarter of an hour, when the owner of the wharf coming to the knowledge of the accident, ſent for a ſurgeon; but he not being inſtantly at hand, his apprentice immediately attended, and finding the face of the child very livid, and conſiderably ſwelled, and the extremities cold and rigid, he very judiciouſly ordered the body to be carried home, and immediately to be put into a bath of hot water, which ſeemed to have a ſurprizing effect in removing the livid appearance. The body was ſuffered to remain in the hot water twenty minutes, and in a few minutes after it was taken out of the bath, the ſurgeon came firſt to ſee it, and proceeded to uſe ſtimulants, and every method ſuggeſted by the ſociety. It was, however, an hour and forty minutes that conſtant frictions had been perſiſted in on each of the extremities, and injections of the fumes of tobacco adminiſtered, before any artery could be perceived to move; when, at length, ſome very indiſtinct tremor was perceivable in the pulſe, attended with a very ſlight kecking of the breath, upon which a ſtrong ſolution of emetic tartar was poured down the throat from a ſpoon; in all, perhaps, five grains were got down, with ſeveral ſmall doſes of oxymel of ſquills: but after all this, for the ſpace of ſtill an hour and a half more, no farther advances ſeemed to have been made, ſo that the by-ſtanders gave up all hopes of life, and concluded it's return impoſſible; yet the ſurgeon ſtill perſevered in the uſe of every ſtimulus he could think of, and at the end of in all four hours, had the pleaſing ſatisfaction of perceiving a very profuſe diſcharge from the fundament, immediately accompanied with a violent vomiting, and gradually powerful increaſe of the pulſe and reſpiration; at firſt, ſeemingly convulſive, but by degrees more enlarged and full, till every favourable circumſtance was fully eſtabliſhed; ſo that in five hours from the time the child was taken out of the river, he had fully eſcaped from all danger.

CASE II.

A Gentleman of the faculty croſſing the water of Eden in Scotland, accidentally ſaw a child in the bottom of the river; he inſtantly diſmounted, ran into the water, and laid hold of the child, (a boy about ſeventeen months old) laid him upon the warm ſand, and called out for help. A man, with three or four women, came inſtantly to his aſſiſtance; blankets, ſalt, and ſpirits, were ſoon procured, and the ſurgeon had a female, and by mere accident alſo, a male catheter in his pocket. The child was laid upon the blankets, with his head a little elevated, and ſtripped of his wet cloaths; the humane aſſiſtant chuſing to begin his work directly where he was, as the day was exceedingly warm, rather than run any riſque by delay, eſpecially as he underſtood that the fires in the neighbouring houſes were moſtly out, or very weak. There was not the moſt diſtant appearance of life; every thing about him had the ſtrongeſt marks of mortality. The ſurgeon began with rubbing his left breaſt with ſalt, and next applied a little hartſhorn to his noſe and lips; his temples were then chafed with ſome aqua vitæ; and finally, the female catheter was introduced into his mouth, and the male one into his noſtril, and the one and the other alternately blown into. After the rubbing, blowing, and chafing, for a quarter of an hour, there was ſtill no appearance of life: every ſpectator ſeemed convinced that the endeavours were fruitleſs, and that it was impoſſible to do any ſervice. They endeavoured at this time to diſſuade the ſurgeon from making any farther attempts; but he ſilenced their clamours by telling them matters could be no worſe than they apprehended, and he was determined to perſevere. One of the women was diſpatched for a bandage, and other neceſſaries, to open the jugular vein. In the mean time the friction was renewed with ſalt, and blowing ſtrongly with the catheters. Anterior to the return of the woman with the bandage, a weak pulſation was perceived at the heart. This exhilarated this benevolent gentleman's ſpirits, and animated him in the diſcharge of what he deemed his duty. By perſevering for a minute or two longer, he could hear a feeble rattling in the throat, and ſaw a weak quivering of the lips; the livid appearance in the countenance began to diſperſe; one of the infant's eyes ſoon half opened; and life ſeemed willing once more to animate his little frame. The hartſhorn was again applied to his noſe and lips; and one of the ſpectators was directed to rub his hands and feet with a little ſpirits. By this time he emitted a little curdled milk which he had taken before the accident happened: he alſo got paſſage of his belly; and now every thing wore a moſt favourable appearance. His mother was ordered to run home, ſtrip, and go to bed; and the child was wrapped in the blankets, and carried to the houſe, by this indefatigable Samaritan. A pair of blankets extraordinary were put upon the bed, and a fire lighted in the room: the heat of his mother ſoon warmed his ſyſtem; he fell into a profound ſleep and profuſe ſweats. A pretty briſk cathartic was adminiſtered next morning, which emptied the ſtomach and bowels of their contents; nothing farther was neceſſary to be done. The boy has had the confluent ſmall-pox ſince, and recovered very well.

As no perſon ſaw him fall into the water, it is impoſſible to ſay with certainty how long he remained there. But if a judgment may be formed from the time he left his mother, the diſtance he had walked, the time he was found, and the ſituation he was in, he muſt have been at leaſt nine minutes under water. It was about twenty minutes after the attempts were begun, before there was the leaſt preſence of life; and it was half an hour, or near that period, that the endeavours were continued, before he was laid in bed.

CASE III.

A Boy, aged ſeven years, ſtrolled with his brother, two years older than himſelf, to a river which runs at the diſtance of about three hundred yards from their father's houſe, where a lighter was anchored. They went into it; and the boy in attempting to get ſome ruſhes which grew by the bank, fell into the river, which in that ſpot was ſeven feet deep. The cries of the elder boy, that his brother was drowned, were inſtantly heard by ſome men, who, at about a hundred and fifty yards diſtance, were hedging round ſome turnips. They ran to the miller; who immediately returned, with the meſſenger and his ſervant, to the ſpot where the boy had fallen in, and were ſo fortunate as to lay hold of him at the firſt trial, and draw him out, apparently dead, with his countenance bloated and livid, and his eyes and ſtomach very much ſwoln. This was ſuppoſed to be about twenty minutes from his firſt falling in. He was immediately carried to the mills; and whilſt ſome neighbours rubbed him well, and ſtripped him from his wet cloaths, and laid ſalt upon his ſtomach, the father went to call a ſurgeon, who arrived at the mill about an hour and a half after the accident, and found ſigns of returning life by the warmth of the body, a ſmall tremulous intermitting pulſe, and interrupted breathing; but he was totally ſenſeleſs; his eyes were ſhut, and his face ſtill bloated and livid. The people of the houſe heated ſome ſalt in a pan, which was applied, ſewed up in bags, to each arm-pit. Two aſſiſtants rubbed each leg and thigh with a warm flannel, whilſt the ſurgeon briſkly agitated the ſtomach and abdomen. This in about two minutes made him vomit up about a quart of water, ſo fœtid, that the ſmell was almoſt intolerable. The fumes of tobacco were then conveyed up the anus, which ſeemed to affect him much, as he was ſeized with violent ſtruggles, and convulſions in his limbs. His teeth were forced open, and a tea-ſpoonful of brandy was frequently poured down his throat, which, by irritation with the ſpoon, always made him vomit up more water. By this time he breathed tolerably well, and his pulſe became full and ſtrong. A vein was then opened in the arm, which bled freely; after tying it up, his pulſe ſeemed languid, and he was much convulſed, and breathed not ſo well as before. The fumes of tobacco, the friction, and the brandy, were now repeated, and he ſoon became better than he was before the bleeding, but ſtill ſenſeleſs, and ſometimes violently ſtruggling. His head being now more particularly affected, the left jugular vein, which ſeemed full and prominent, was opened, from which one guſh of blood came, and then it totally ceaſed bleeding. An aſſiſtant was ordered to rub his head briſkly. In about a minute and a half the vein began to drop; after the ſame diſtance of time, he bled in as full a ſtream as from the arm; the convulſions ſoon after ceaſed; the pulſe beat quite regular and even; he breathed eaſy, and fell into a calm profound ſleep, from paſt nine at night till eight the next morning; when he awoke in perfect health, got out of bed to make water, and eat ſome bread and butter. He afterwards continued free from any kind of complaint, but had not the leaſt recollection of his ever having fallen into the water.

CASE IV.

A Gentleman's ſon, about five years old, fell into a river, in which, by the beſt accounts which could be obtained, he muſt have remained ten minutes at leaſt. He was diſcovered by his father, floating near the oppoſite ſhore, from whence he fell in; his head, arms, and legs under water, ſo that part of his back only appeared above the ſurface. His unhappy parent immediately plunged into the river to his aſſiſtance, and brought him directly into the houſe, which was fortunately very near, to all appearance dead. Having cauſed his wet cloaths to be forthwith removed, he had him wrapped in a warm blanket, and laid before a fire, whilſt the aſſiſtants were preparing hot cloaths and flannels for frictions. The extremities of the child were ſtiff with an univerſal coldneſs, no perceptible pulſation in the arteries of the temples or wriſts; he was placed between warm blankets in a bed, with his head a little raiſed; bottles of hot water were applied to the ſoles of his feet; in a ſhort time after his legs were immerſed in a pail of warm water; frictions with hot flannels and cloths were applied to the breaſt, abdomen, and extremities; a warming-pan, moderately heated, along the ſpine, and volatiles to the noſe and temples. In a few minutes he moaned; after that he began to cry out, which he continued more loudly than at firſt, for the ſpace of twenty minutes, till his efforts towards reſpiration were very ſtrong; but at this time his breathing was laborious, with frequent interruptions, and an encreaſed ſcreaming noiſe; his limbs now became flexible; the pulſes at his wriſts were at this time perceptible, but exceedingly feeble. He was now ſeized with ſpaſms in his extremities, and became univerſally convulſed. A ſtimulating clyſter was thrown up the inteſtines, which ſeemed to have very good effects; but it was a full hour before he recovered any conſciouſneſs, at which time he took ſome wine and water warm, and ſeemed diſpoſed to ſleep, which he fell into and enjoyed for the ſpace of three hours. In the evening he was free from complaints, except a ſlight head-ache, and ſmall degree of thirſt; his ſkin was rather hot, and his pulſe more quick than natural. He took a gentle laxative medicine, which produced the deſired effect; and by the morning he was in apparent good health, and nothing worſe for his accident.

CASE V.

A Child, aged two years, fell into a ſpring that was at the bottom of a garden. It is ſuppoſed, from circumſtances, that the child muſt have been under water near half an hour. Some minutes were elapſed before it's mother had miſſed the infant. Apprehending it might have wandered near the ſpring, ſhe ran to the place, but not finding it there, ſhe ſearched the ſtable and other out-houſes, and afterwards returned to the ſpring, where examining more minutely with a ſtick, ſhe perceived the child. It was taken up without any ſigns of life, and carried into a neighbouring houſe. The attendants rubbed the child with ſalt, but this did not ſeem to be of any ſervice. They ſent a meſſenger to it's father, who was at work about half a mile from the place, deſiring him to run to a ſurgeon, who lived at the diſtance of about a mile and a half. From the time that the child was taken out of the water, to the arrival of the ſurgeon, it is imagined that an hour had elapſed; and he found the child placed by the fire, not in the leaſt recovered. His body was wet and cold, for in their confuſion they had let it remain in it's wet cloaths. The ſurgeon ordered it to be immediately undreſſed, and placed in a warm blanket. Hot bricks, wrapped in a cloth, were put to it's feet. The ſmoke of tobacco was applied to the inteſtines. Theſe and other methods were purſued with vigour, but it was more than half an hour before any favourable ſymptoms appeared. The firſt was a frothing at the mouth; this was ſucceeded by twitchings and ſlight convulſions. Upon irritating it's throat, the child puked, which ſeemed to revive it yet more. In the ſpace of two hours it began to be tolerably well recovered, though it breathed with difficulty. The difficulty of breathing continued for two or three days; but the child was afterwards perfectly recovered.

CASE VI.

TWO fiſhermen of Brighthelmſtone, going off in a ſmall boat to take ſome mackarel from a fiſhing-boat oppoſite to that town, in their return to ſhore, by a ſudden ſquall of wind and a great ſea, their boat was overſet, and the two men unhappily caught under the boat, where they continued in that diſtreſſed condition for a quarter of an hour, before any body could afford them any aſſiſtance, from the very great roughneſs of the ſea. A ſurgeon was with them as ſoon as they were brought from the ſhore, and one of them was ſo far gone as to afford little or no hopes of recovering. But by immediately purſuing with diligence the method recommended by the ſociety, in about a quarter of an hour a manifeſt glow and warmth was perceived all over his body and extremities. By perſevering in rubbing him with hot flannels and ſalt, and by applying bottles of hot water to his feet, arm-pits, &c. he became more and more ſenſible, and was ſoon quite recovered from the accident, excepting a large contuſion upon his leg, which, after ſome time, got well. The other man recovered alſo; but his ſymptoms were much more favourable, owing to his being able, naturally and immediately, to diſcharge a large quantity of ſea-water from his ſtomach.

CASE VII.

ON Monday March 24, 1777, a child about fifteen months old fell into a river that runs at the bottom of a garden, and was carried down the ſtream about thirty rods, to a mill uſed for dreſſing of leather. Two men who were at work at the mill ſaw the child, took him out, and ſent immediately for a ſurgeon. When he came, he found the child with it's eyes cloſed, quite cold, without the leaſt ſign of life, and to all appearance dead. A fire was ordered to be made, and the wet cloaths to be taken off with all poſſible expedition. The body was placed before the fire, and dried with warm linen cloths, (which abſorb the wet much ſooner and better than woollen ones;) and then the ſurgeon, aſſiſted by ſome others, began rubbing with flannel cloths, wetted with brandy, with ſome ſpirits of hartſhorn mixed in it; and in about five minutes the child made a ſlight groaning kind of noiſe, which was increaſed by the continual rubbing: ſoon after he vomited about half a pint of water. The groaning then increaſed, and evident ſigns of returning life appeared. The rubbing was continued for about three quarters of an hour, and then the poor diſtracted mother was directed to go to bed, and take the child cloſe to her, and to continue the rubbing along the ſpine. In the evening he fell into a ſound ſleep, and a gentle ſweat, breathing very eaſy and well.

It was full a quarter of an hour, from the commencement of the rubbing, before the leaſt degree of warmth could be perceived in the child, and about twenty minutes before any pulſe could be felt at the wriſt, and then very faintly; all the time he never opened his eyes, or moved his limbs in the leaſt.

CASE VIII.

ON Sunday night, July 5, 1778, at about half paſt ten, a youth, aged eighteen, an apprentice, was brought home to his maſter's houſe upon boards, to all appearance dead, from a ſtroke of lightning. Upon entering the room, and examining the body, it was found to be both ſtiff and cold, nor could the leaſt warmth be perceived in any part of the body or extremities: his fingers and toes were contracted, his eyes ſunk, and his countenance livid. His wet cloaths were immediately ſtripped off, and he was placed with all poſſible expedition between blankets made very hot. The aſſiſtants then uſed ſtrong friction over the whole body. During this, a very large orifice was opened in the bazilic vein, and by ſlow degrees near twelve ounces of blood was drawn. Volatile and cordial medicines were forced into the mouth, but for a conſiderable time to no effect, he being totally incapable of ſwallowing. Large bliſtering plaiſters were applied to the whole ſpine of the back, and to both the feet. In half an hour, about eight ounces more of blood were procured, and by the repeated uſe of volatiles, together with the ſtrongeſt frictions the whole time, at about half paſt eleven a very ſlight convulſive motion of the diaphragm, or hiccough, was perceived, which was ſucceeded ſome little time after by a ſlight warmth and irregular pulſation of the heart; and ſoon after by a very ſlow interrupted reſpiration. Before twelve he began to ſwallow, and by ſteadily uſing the friction and volatiles for an hour longer, a regular pulſation enſued; the lungs performed their office, and a gradual heat and recovery of every faculty ſucceeded. About one he ſpoke, though not articulately. In the morning he was in a conſiderable fever, in a great meaſure accounted for by the pain of the bliſters, and the medicines applied the preceding night: but by the uſe of a cooling regimen, together with occaſional laxatives, he was reſtored to the enjoyment of perfect health in the courſe of a week. Upon the ſtricteſt examination of the body when firſt brought home, no external injury appeared, except a bruiſe along the right-arm, which, it is preſumed, he received either from the firſt fall, or at the time of being placed on the board for conveyance, either ſufficiently accounting for ſuch appearance. Upon being queſtioned as to what had happened, he knew nothing but from the teſtimony of his companion, who was not in the leaſt affected. It appears that they had been at Iſlington, and were, on their return, caught in a ſtorm near the turnpike at the London Apprentice, Hoxton; at which time this youth was ſtruck down at the other's feet: and it appears, from the beſt calculation, that before the other could procure help to have his companion conveyed home, and medical aſſiſtance could be had, an hour at leaſt muſt have elapſed, during all which time he was in very heavy rain.

CASE IX.

A Young woman, aged only twenty-two years, in a fit of deſpair, attempted to deſtroy herſelf by hanging. In this ſtate ſhe was diſcovered, and cut down in about a quarter of an hour from the time it was ſuppoſed, from circumſtances, ſhe had been ſuſpended, and ſhe was then totally inſenſible and motionleſs: there was no perceptible beating of the heart, nor pulſation in the arteries of the wriſts or temples; reſpiration had alſo apparently ceaſed; the face was ſwoln and livid, and there was a frothing at her mouth. Several perſons were immediately employed in aſſiſting to place the patient between warm blankets, in uſing frictions, and in blowing ſtrongly into the lungs, by applying the mouth to that of the unfortunate perſon. It was with difficulty that any one could be perſuaded to undertake this operation, till the medium of an handkerchief was ſuggeſted, and then one of the women applied with great earneſtneſs to the buſineſs. A warming-pan, moderately heated, was rubbed over the back for a conſiderable time; the feet and legs were firſt immerſed in warm water, and then rubbed with warm cloths; volatiles were alſo applied to the noſe and temples. After they had perſiſted in the uſe of theſe means for upwards of twenty minutes, ſome ſigns of returning life were perceived, ſuch as ſighing, and ſlight twitchings. Theſe were followed in a little time by convulſive motions, a beating at the heart, and a pulſe at the wriſts, with a return of the natural colour and warmth. It was then judged proper to take away a few ounces of blood, to prevent the effects of a preſſure upon the brain, which might happen from a ſurcharge of blood, forced into the veſſels by the ſtrangulation of the cord. The girl from that time gradually recovered, and was ſoon perfectly reſtored, body and mind, and to appearance ſincerely penitent.

CASE X.

ON Saturday Auguſt 30, 1777, at five o'clock in the afternoon, a woman in a fit of inſanity, hung herſelf with a garter faſtened to a ſtaple in the cieling of her chamber, and was ſuſpended by the neck full a quarter of an hour, as appears from many circumſtances collected from her huſband and ſervants in the houſe. When the huſband found her, as above deſcribed, (he wanting ſome keys ſhe had in her poſſeſſion, and going in ſearch of her) he cut her down, and ſent immediately for a ſurgeon, who was there in a few minutes, and was met at the door by ſeveral people who had ſeen her, and told him he could not be of any uſe, as the woman was certainly dead. The ſurgeon, however, paid no attention to them, but puſhed up ſtairs, where he found her lying upon a bed, cold, motionleſs, no pulſe, and to all appearance dead. He had her ſtripped and put inſtantly into a warm bed; and having opened a vein in the arm, a few drops of blood followed the lancet, but ſoon ſtopped. The ſurgeon's aſſiſtant and three women were ſet with fleſh-bruſhes and flannel cuſhions to make all the friction they were able upon the extremities, whilſt her breaſt was rubbed with a piece of flannel, and ſome volatile ſpirits which he happened to have with him. Warm flannels were conſtantly applied to the belly, and her mouth moiſtened with brandy. In about ten minutes the blood puſhed from the orifice in the arm, which was directly ſtopped, nor was ſhe ſuffered to loſe one ounce. The lungs were then inflated, by blowing down the throat. In about a quarter of an hour, that operation ſeemed to have an amazing effect, it appeared to ſtimulate the lungs, and a ſmall convulſion was immediately perceived on the ſide of the neck. Half an hour was elapſed before a perfect pulſe could be diſtinguiſhed; and then the ſtrokes were at a great diſtance one from another. The body grew univerſally warm; and upon inflating the lungs again, ſhe made a faint reſpiration; after which ſhe grew ſtronger, and was able to take a ſmall ſpoonful of brandy, and ſhe began in three quarters of an hour to recover very faſt. She breathed tolerably free, and the motion of the heart was perceptible. Eau de luce was applied to her noſtrils, which had a particular effect upon her, as it appeared to ſtimulate her from head to foot. Theſe methods were continued an hour and three quarters, when ſhe breathed freely, and was able to ſwallow now and then a ſpoonful of cordial julep. About eight o'clock ſhe was much recovered; at ten ſhe opened her eyes, and at twelve ſpoke faintly. She continued growing better every minute, and on Sunday was able to ſit up in her chamber. On Monday appeared perfectly well, except the wound upon her neck made by the garter, which digeſted out very deep indeed.

CASE XI.

A Fine infant, aged about eighteen months, having been laid to ſleep on a bed, the bedſtead of which was made to turn up, was by the careleſſneſs of a ſervant covered with ſome cloths, and then turned up, in which ſituation the child remained an hour and a half before it was diſcovered; at which time it's countenance was livid and ſwoln, the eyes half ſhut and fixed, and the mouth a little opened. No reſpiration nor pulſation of any of the arteries, or of the heart, was perceptible: a profuſe ſweat, attended with that clammineſs, which is always an alarming ſymptom, was diffuſed over the body. It's cloaths were immediately cut off, and the body being ſtripped entirely naked, was expoſed to the open air, that the external veſſels might be conſtringed thereby, and the blood being propelled inwardly, might ſtimulate the heart to it's wonted action; in this reſpect differing from the methods recommended in ſuffocation by water, by which the circulation is originally checked externally. The other means uſed were ſimilar; ſuch as gently agitating the body, and varying it's poſition; applying gentle frictions, firſt to the breaſt, and afterwards to the extremities, and rubbing volatile ſpirits upon the temples and noſtrils: in about ten or fifteen minutes, ſymptoms of returning life appeared; ſuch as pulſation in the arteries, ſighs at intervals, and the like. Theſe gradually increaſed till the next morning, when the infant appeared perfectly recovered.

CASE XII.

APRIL 9, 1778, two common women, about five in the morning, went to ſleep in a hut where the tools are kept, adjoining to a lime-kiln. At nine they were found there to appearance dead from ſuffocation. On the arrival of medical aſſiſtance, one of them was found to have ſtill ſome little pulſe and reſpiration. About ſix ounces of blood were taken away from her, and frictions, with volatile alkali, uſed for near half an hour in the field, but without any ſenſible advantage. Some of the ſolution of tartar emetic was attempted to be given her, of which ſhe ſwallowed very little, if any. She was taken to an infirmary at ten, ſeemingly having loſt ground. There was then no pulſation at the wriſt;

that at the heart was very languid; the body was cold, the jaws and hands were ſtrongly cloſed; the reſpiration was obſcure, ſhort, and laborious; the eyes were ſhut and inſenſible to the action of light; and there was a convulſive conſtriction of the throat. Warmth and general frictions were very aſſiduouſly applied for twenty minutes, without any ſenſible progreſs, except a ſmall degree of warmth, even leſs than might have been expected from the continued frictions; gentle attempts were made (in vain) to force open the jaw for the introduction of ſome liquid; warm fomentations were then applied to the trunk and extremities, and ſeemed ſoon to produce much more beneficial effects.

In about ten minutes the breathing and warmth began to improve, the jaw relaxed a little, the pupil was ſenſible to the light, and in ten minutes more a pulſation was firſt perceptible at the wriſt, and her breathing much freer. Some cold water was given her, which, after ſeveral efforts, ſhe ſwallowed with great difficulty; as ſhe did, ſoon after, by degrees, a ſolution of a grain and a half of emetic tartar, which vomited her in about an hour. A ſtimulating clyſter was then thrown up, and the firſt thing ſhe ſeemed to be ſenſible of was the deſire of parting with it. At twelve ſhe could not ſpeak, but when aſked how ſhe did, ſhe opened her eyes and ſhook her head. About two ſhe ſpoke; and in the evening was much recovered: her breathing was ſtill laborious, and her pulſe very ſmall. She was bled, and took a mixture of æther. April 10, ſhe was well recovered, and the next day left the infirmary.

CASE XIII.

A Child, two years old, ſon to a ſkinner and white-leather-dreſſer, fell into an old lime-pit of his father's. His mother declared that he had ſlipped out of the houſe from her, and ſhe had not ſeen him for at leaſt a quarter of an hour: be that as it may, he was providentially diſcovered by an elder brother, floating on his back, with his head below the water. He jumped into the pit, had ſtrength enough to take him up, but could not carry him into the houſe: on the alarm given, his mother and others did ſo, and undreſſed him. In the mean time a ſurgeon was ſent for, who found him ſtiff, without any pulſe; his eyes fixed, and his face, particularly his lips, very livid. He was ordered to be laid before a good fire on a woman's knee, and two others were conſtantly employed in rubbing his breaſt, back, and ſides, with warm flannels, while the ſurgeon was rubbing his temples, lips, and noſe, with ſpirits of hartſhorn. Five minutes were ſpent without any proſpect of ſucceſs; however, the aſſiſtants perſevered, and before ten minutes were elapſed, his eyes began to move, and the colour of his face was gradually returning. In a few minutes more he yawned, and moved his lips, with frequent attempts to vomit. A tea-ſpoonful of warm brandy and water was then given at proper periods, by which, and the continued friction, he appeared in a fair way of recovery, though the colour of his lips was not altered. He was now ordered to be wrapped in a blanket well warmed, and put to bed in his mother's arms. He ſoon fell aſleep, and after two hours awaked in ſeeming good health; though, for fear any of the lime-water which he might have ſwallowed ſhould hurt the ſtomach and bowels, he was ordered to drink barley-water, in which a conſiderable quantity of gum-arabic was diſſolved, and he was directed to take a doſe of ſenna with manna; which had ſo good an effect, that next day he was in perfect health.

CASE XIV.

A Farmer, in a village in the county of Salop, about half paſt twelve o'clock at noon, found means, during a fit of inſanity, to hang himſelf, whilſt the reſt of the family were buſily engaged in the affairs of the houſe. The time he continued in the above ſituation, cannot be exactly aſcertained; but from a variety of concurring circumſtances, it is firmly believed to be about twelve or fourteen minutes, ſome think between fifteen and ſixteen. When he was cut down there was not the leaſt apparent ſign of life remaining; it was, however, recommended by ſome of the neighbours, to ſend to a neighbouring town with all poſſible ſpeed, to requeſt the attendance of a ſurgeon, who fortunately happened to be at home when the meſſenger arrived, and ſet off inſtantly. During this interval, (about thirty-five or forty minutes) the attendants did every thing they could think of to promote his recovery; and a ſhort time before the ſurgeon ſaw him, he had been obſerved to fetch a few deep ſighs, or gaſps, though a conſiderable ſpace of time had elapſed between each. Upon examination, ſcarce any perceptible motion could be found in the artery at the wriſt; the ſurface of his body was remarkably cold, particularly his extremities; the blood was ſettled in his face, ſo as to make his mouth and lips appear very livid; a large quantity of frothy ſaliva was frequently diſcharged, together with ſeveral clots of coagulated blood. As there was no time to be loſt, the ſurgeon immediately ordered him to be placed upon a bed (till now he had been ſupported between two aſſiſtants upon a chair) with a hot blanket under him, his head and ſhoulders a little raiſed; in this attitude four ſtrong men were employed to make uſe of the moſt powerful friction, with warm flannels, ſtrong volatile ſpirits were frequently applied to his noſe and temples: the doors and windows were kept open, ſo that the freſh air might have free acceſs to him; in a ſhort time the good effects of the above treatment were very viſible, an agreeable warmth began to be diffuſed over the ſurface of the body; his gaſps and ſighs became more frequent, his pulſe became ſtronger, and the vibrations more regular. Soon after the appearances of the above favourable ſymptoms, he was attacked with the moſt violent ſpaſms, and they became ſo general, that there was ſcarcely a muſcle in the whole ſyſtem unaffected. A vein was now opened during a remiſſion of the ſpaſmodic contractions, and about eight or nine ounces of blood were drawn, in hopes that evacuation might be a means of abating this troubleſome ſymptom; but it did not ſucceed, for they continued with unremitting violence near an hour after, ſo that the aſſiſtants had often great difficulty to keep him upon the bed: an attendant was obliged to keep his thumb upon the orifice the whole time, as his arm could never be kept ſufficiently ſteady to apply a bandage till the ſpaſms left him. About four o'clock, they began to diminiſh, and in a few minutes left him entirely, when he immediately fell into a fine eaſy ſleep, and was in every reſpect ſo compleatly reſtored, that all the attendants (except one) were ordered to leave the room, that he might not be diſturbed. He continued in a doſing ſtate till between ten and eleven o'clock the ſame night, and then awaked perfectly ſenſible, but complained of a prodigious ſoreneſs in the muſcles of his back, breaſt, and throat. The next day, he had a continual diſcharge of ſaliva from his mouth, together with a remarkable ſoreneſs in his gums and teeth, ſimilar to what occurs during a ſpitting raiſed by the uſe of mercury; his neck, where the cord had preſſed, was very black, particularly that part where the knot was applied, which was under the ear, and the whole of the muſcle was much inflamed, ſore and tender. An acid gargle was ordered for his mouth, and a diſcutient embrocation to be frequently applied to his throat externally, from the uſe of which, all complaints gradually diſappeared, and at the end of ſix days he was in perfect health.

CASE XV.

A Cooper of Deptford, bathing in the river Thames, near the Greenland Dock, Rotherhithe, was accidentally drowned. After being under water ten minutes, he was taken up, but to all appearance dead, and conveyed to an apartment of another, a cooper, where frictions with ſalt and brandy were uſed, and volatile aromatic ſpirits were applied to the temples, wriſts, and cheſt, and as ſoon as poſſible he was put into a warm bath; about twenty minutes after which a ſpaſm was perceived in the lower jaw; the frictions were ordered to be well continued upon the ſpine; ſoon after came on a total ſpaſm; but he was ſtill kept in the bath for near an hour, by which time he began to ſigh: endeavours were then made to get a little warm brandy and water down, but this was effected with great difficulty, a contraction being ſo ſtrong on the lower jaw; yet the trial was very often repeated, until ſuch time as he ſwallowed with eaſe. Soon after he began to cry, and utter ſome words, but not ſo as to be underſtood; the frictions and other means were continued until he was capable of ſpeaking diſtinctly. He was then taken out of the bath, and wiped dry; and being wrapped in flannel, was put into a warm bed: a cordial mixture was then given him, but in the courſe of an hour he had ſeveral fits. The medicine was repeated; and by the evening he had doſed and was better, but complained of much ſoreneſs upon the parts where frictions had been made uſe of; notwithſtanding which he was able to be carried home in a chaiſe the next morning, but having no ſtool and his fits returning, a laxative mixture was ordered, from which time he continued to grow better.

CHAP. VI.

Of Perſons apparently dead from Intoxication and Convulſion Fits.

SCARCE a week paſſes in which the deaths of one or more perſons are not announced in the public papers, who are ſuppoſed to be deſtroyed by the immoderate uſe of ſpirituous liquors. Intoxication with other fluids, though, when often repeated, it always proves fatal at laſt, does not produce it's deleterious effect ſo ſuddenly.

Nor do even ſpirits always occaſion immediate death, though taken in ſuch quantities as to bring on all the appearances of mortality: they ſometimes act as opiates; and though the vital functions are ſuſpended, it is by no means certain that the uſe of them may not be recovered.

When, therefore, after a debauch of this moſt unjuſtifiable kind, the body either aſſumes the appearances of death, or ſo long a ſleep ſucceeds as to beget apprehenſions of it's eternal continuance, all rouzing and ſtimulating methods ſhould be tried; ſuch as ſhaking, raiſing it on the legs, and moving it acroſs the room: volatiles alſo ſhould be applied to the noſe, and the forehead, temples, and wriſts, rubbed with Hungary water, lavender water, or other aromatic ſpirits. If the pulſes are ſtrong, it may be right to take away a few ounces of blood; but this muſt depend on circumſtances: if the mouth can be got open, a ſpoonful or two of lemonade, vinegar and water, or other acid mixture, may be conveyed into it; and if any part of it ſhould paſs into the ſtomach, it may poſſibly produce favourable effects.

If none of theſe endeavours prove effectual, the lower extremities may be bathed in warm water, and a ſtimulating clyſter thrown up; and upon the appearance of returning life or ſenſibility, the patient ſhould be treated as on recovery from any of thoſe ſudden deaths mentioned in the directions of the Humane Society.

But beſides thoſe whoſe lives are apparently loſt from the immediate effects of large draughts of ſtrong liquors, there are many others who are actually ſacrificed to neglect or inattention whilſt they are under the influence of drunkenneſs.

Men in this ſituation are always perverſe, obſtinate, and abſurd; acquiring ideal wiſdom as they part with common-ſenſe, they ſcorn to be ſupported, guarded, or accompanied; and frequently perſiſt in retiring to ſome unobſerved place, where they ſleep not only in aukward poſtures, unfavourable to the diſcharge of the enormous loads with which their ſtomachs are oppreſſed; but with all the ligatures of ſtock or neckcloth, garters, tight wriſts, and other unnatural compreſſions.

Nor is this the only danger which attends perſons devoted to this wretched vice. Unable to ſupport the weight of their overbalanced heads, they fall down in ſand, mud, or water; and, incapable of raiſing themſelves, periſh in that miſerable condition: a fate which may in general be averted, if their friends would pay a little regard to them, and, when they appear diſpoſed to ſleep, lay them carefully on their beds, on their ſides, with the heads ſomewhat raiſed, and in ſuch poſitions as to prevent their twiſting their necks, and endangering ſtrangulation.

Thoſe who are accuſtomed to drink to exceſs are ſubject to extreme thirſt, which they quench with the firſt liquor they can get at, without regard to the quality of it, or the effect it may produce; thus it may eaſily be conceived, that draughts of milk, poured into a ſtomach which has for many hours been the receptacle of ſour punch, muſt coagulate and become wholly indigeſtible; and that vapid ſmall beer waſhing inteſtines inflamed by ardent ſpirits, muſt occaſion ſo ſudden a change as to be productive of dangerous conſequences. Warm tea of herbs, barley-water, water with a toaſt, or a ſpoonful of the ſyrup of capillaire in it, are the ſafeſt drinks on theſe occaſions.

When children, or other perſons previouſly in good health, appear to be carried off in convulſions, they ſhould by no means be interred until attempts have been made to recover them; and to this end the ſame means may be tried as have been already pointed out in other caſes of accidental death; and the like means ſhould be tried on children apparently dead born, or who ſeem to expire immediately after they are brought into the world: a life ſaved is of importance to the community, and the hopes of many families have probably been loſt for want of ſuch aſſiſtance as is within the reach of every individual.

We ſhall conclude this chapter with a caſe mentioned in a very ingenious pamphlet on the practicability of recovering perſons viſibly dead.

CASE.

IN the pariſh of St. Clement's, at Colcheſter, a child of ſix months old, lying upon it's mother's lap, having had the breaſt, was ſeized with a ſtrong convulſion-fit, which laſted ſo long, and ended with ſo total a privation of motion in the body, lungs, and pulſe, that it was deemed abſolutely dead. It was accordingly ſtripped, laid out, the paſſing bell ordered to be tolled, and a coffin to be made: but a neighbouring gentlewoman who uſed to admire the child, hearing of it's ſudden death, haſtened to the houſe, and upon examining the child, found it not cold, it's joints limber, and fancied that a glaſs ſhe held to it's mouth and noſe was a little damped with the breath; upon which ſhe took the child in her lap, ſat down before the fire, rubbed it, and kept it in gentle agitation. In a quarter of an hour ſhe felt the heart begin to beat faintly; ſhe then put a little of the mother's milk into it's mouth, continued to rub it's palms and ſoles, found the child begin to move, and that the milk was ſwallowed; and in another quarter of an hour ſhe had the ſatisfaction of reſtoring to it's diſconſolate mother the babe quite recovered, eager to lay hold of the breaſt, and able to ſuck again. The child throve, had no more fits, grew up, and was alive ſeveral years after.

BOOK XI.

Surgery.

CHAP. I.

Of giving general Aſſiſtance without Chirurgical Skill.

IT would be foreign to the purpoſe of our preſent work, to point out and deſcribe the various operations of ſurgery, or to give directions in caſes where anatomical knowledge is neceſſary; the manual ingenuity of the ſurgeon can only be acquired by ſtudy and practice, and before any progreſs can be made in this branch of the profeſſion, an intimate acquaintance with the wonderful ſtructure of the human body is abſolutely neceſſary.

Yet there are a variety of caſes in which help may be adminiſtered by perſons wholly unſkilled in ſurgery; and many dangerous circumſtances may perhaps be prevented, by attending to a few plain and eaſy directions, which we mean to give in the following chapters.

Our readers will therefore underſtand, that we intend to give them ſuch inſtructions as may effectually anſwer their purpoſes in caſes of common and ordinary accident, unattended with any critical or dangerous circumſtances; and even in ſuch caſes, to offer ſome hints for management, till the help of a ſurgeon can be obtained, which in many parts of Great Britain, and eſpecially the leſs populous provinces, may be wanted ſome hours before the utmoſt exertions of aſſiduity and ſpeed can procure it.

CHAP. II.

Of Green Wounds.

THOSE wounds which are inflicted by a ſharp knife, a razor, or other edged inſtrument, and which neither divide any conſiderable veſſel, nor penetrate into the internal parts of the body, are not attended with any conſiderable difficulty in the cure; in theſe caſes, a pledget of dry lint. ſecured by a bandage of ſoft linen cloth, will generally anſwer every purpoſe: if the effuſion of blood is conſiderable, a little of the friar's, or vulnerary balſam, may be dropped on the pledget.

To make the friar's balſam,

> Take of gum Benjamin in powder, three ounces—of balſam of Peru, two ounces—of hepatic aloes powdered, half an ounce. Infuſe theſe ingredients in a quart of rectified ſpirit of wine for three or four days in moderate heat; at the end of this time ſtrain it off fine.

And in this place it may be right to caution our readers againſt the vulgar practices of applying greaſy plaiſters, ointments, bruiſed herbs, and a thouſand other kinds of noxious dreſſings to the wounds which we now deſcribe; not one of theſe is calculated to benefit the wounded perſon, but moſt, if not all of them, are likely to do him injury. The moſt ſimple applications are certainly the beſt; and, as we have already obſerved, ſlight wounds are in general cured without any other remedy than dry lint, and guarding them againſt the air by a bandage.

But if the wound hath been occaſioned by any ſuch accident as may have introduced any foreign body into it, ſuch as hair, dirt, bone, parts of weapons, ſplinters, bullets, glaſs, rags, or waddings of tow or paper, the wound ſhould be carefully examined, theſe unnatural bodies extracted, the coagulated blood taken away, and the whole thoroughly cleanſed, before any dreſſing is applied. Yet this muſt be done cautiouſly, and with due regard to the ſituation of the patient; for, in ſome caſes, and in particular when the effuſion of blood has been ſo conſiderable as to weaken him, it may be attended with much danger to fatigue or exhauſt the patient farther, till he has had ſome reſt; and in that caſe it will be right to bind up the wound for the preſent, and proceed to the examination of it when the patient's ſtrength is in ſome meaſure recruited.

And, indeed, in ſome inſtances, foreign bodies are lodged in ſuch a way as to render it difficult to extract them immediately; yet they are afterwards looſened and diſcharged ſpontaneouſly as the wounds digeſt: and in other caſes they remain years, nay, even during life, without being inconvenient, or producing any dangerous conſequences.

And in extracting bodies which have penetrated deep in the fleſhy parts of limbs, and have paſſed through great veſſels and nervous parts, and the oppoſite parts are equally full of veins, arteries, or nerves, or a bone is interpoſed, the foreign ſubſtance is recommended to be taken out the ſame way it entered; but if it hath paſſed the bone, and no difficulty ariſes from the intervention of the veſſels or parts juſt mentioned, it hath been thought adviſeable rather to facilitate the extraction on the oppoſite ſide by inciſion, than to tear and diſturb the parts it went through, by drawing it back. But this depends ſo much on particular circumſtances, and requires ſo much judgment to determine, that it is in moſt caſes prudent to ſuſpend all endeavours to extract ſuch foreign bodies as are buried deep, or ſtrongly retained, till proper aſſiſtance can be had.

If the wound is in the head, or any other part of the body which is covered with hair, it will be right to have it ſhaved, that it may not obſtruct the application of medicines; and the clotted blood may be removed with a ſponge, dipped in warm red wine and water; but if the wound is deep, and there is danger of a freſh flow of blood, this had better be left to be ſeparated and thrown off by digeſtion.

In ſome inſtances, where any of the larger blood-veſſels are lacerated or cut, the immediate diſcharge of blood may be ſo great as to call for ſome endeavours to ſtop it, even before the arrival of a ſurgeon; and this may generally be done by an occaſional tournequet, if the wound is in a limb, and which may be made in the following manner: Take a broad ribband or fillet, and binding it looſely two or three times round the limb, a little above the wound, ſew the end ſtrongly; under this bandage introduce a ſmooth round ſtick about eight inches long, and of thickneſs ſufficient to bear being twiſted round till the ſtricture ſtops the blood; in this poſition it may be ſecured till aſſiſtance can be got: but particular care muſt be taken not to ſtrain this bandage after the blood ceaſes to flow, which may occaſion inflammation, and conſequent mortification.

But where this ſtricture cannot be applied, other methods muſt be taken to prevent the loſs of blood from proving fatal; for this purpoſe a great variety of ſtyptics and aſtringents have been adviſed, and among them the following:

> Take blue vitriol and alum, of each one ounce and a half; diſſolve them in one pint of boiling water; ſtrain off the liquor, and add to it half an ounce of oil of vitriol. Shake the whole well together.

If theſe ingredients are not at hand, the blue vitriol, in ſomewhat larger quantity, diſſolved in water, may anſwer the purpoſe; and if even this cannot be had, rectified ſpirit of wine may be tried.

Agaric of the oak is alſo recommended, and in many caſes has proved ſucceſsful, when other applications have failed; and as it is eaſily procured, and may be kept ready for uſe in every family, we ſhall give the directions of a very ingenious phyſician, though of a foreign country, for gathering and preparing it for uſe, and applying it.

Gather in autumn, while the fine weather continues, the agaric of the oak, which is a kind of fungous or excreſcence iſſuing from the wood of that tree. It conſiſts at firſt of four parts, which preſent themſelves ſucceſſively: the outward rind or ſkin, which being uſeleſs, may be thrown away—the part immediately under the rind, which is the moſt valuable; and this being beaten well with a hammer till it becomes ſoft and very pliable, which is the only preparation it requires, is to be applied in a ſlice of a proper ſize directly over each of the wounded blood veſſels; and having conſtringed and brought the divided parts of the veſſel together, and ſtopped the bleeding, generally falls off at the end of forty-eight hours; but in the mean time muſt be ſecured by a bandage, applied ſo tight as to prevent it's ſlipping from the wound—the third part of the agaric which adheres to that laſt deſcribed, is of very inferior quality, but may ſerve to ſtop the bleeding of the ſmaller blood veſſels—the fourth and laſt part being reduced to powder, may conduce to the ſame end. The ſame writer is of opinion, that where agaric is not to be had, ſponge uſed in the ſame way, will produce nearly the like effects.

If the wound is deep, and more eſpecially if it has been inflicted with a blunt weapon, and the edges of it are unequal, it muſt be kept open till the bottom is cleanſed, that the fleſh may grow up on the ſides, without which it would increaſe too faſt, the orifice cloſe, and the matter and filth lodge within; from whence would enſue pains, inflammations, abſceſſes, and ulcers; for this purpoſe, tents or pledgets of lint muſt be uſed, according to the figure of the wound: but particular care muſt be taken that they are neither too long or too large, and eſpecially if the wound is in any nervous part, as they would in that caſe inevitably occaſion acute pain, and irritate the nerves: as the wounds heal, this external dreſſing muſt be leſſened in ſize and length by degrees, that the fleſh may have liberty to grow; and theſe pledgets or tents may be kept in their places by a plaiſter of the following ſimple compoſition.

> Take of yellow bees-wax, ſix ounces—of mutton ſuet, four ounces—of white reſin, three ounces. Melt theſe ingredients together, ſtirring the whole till it is ſmooth.

If the wound made with a ſharp edged inſtrument be in a limb, and longitudinal, it may be kept together by the compreſſion of a bandage; but if it be in the face or body, or received in a tranſverſe or diagonal direction, the lips muſt be brought together, and ſecured by ſtitches with a needle and thread, or ſilk; but this is an operation which ſhould be performed by a ſkilful ſurgeon, and great care is alſo neceſſary to take out the ſtitches as ſoon as the ſides of the wound adhere, and particularly in the face, where the continuance of them for any conſiderable length of time will be apt to occaſion ſcars; but this may indeed be avoided by the uſe of another kind of compreſſion, which is formed by narrow ſtrips of thick linen, ſpread with ſome ſtrongly adheſive compoſition, and laid acroſs the wound, at diſtances not exceeding a finger's breadth.

After the blood has been ſtopped, and the wound brought together if neceſſary, a pledget of dry lint laid over it, is perhaps the beſt dreſſing that can be applied; and if there is no ſuſpicion of any remaining dirt or foreign matter in the wound, it may continue unchanged for eight and forty hours, at the end of which time this firſt dreſſing may be removed, unleſs it ſticks ſo cloſe as to endanger a renewal of the hæmorrhage, or to give conſiderable pain; in which caſe, the ſides and external ſurface of the pledget may be well wetted with a feather dipped in oil, which will probably bring it away at the next opening: but if this ſhould fail, and it becomes abſolutely neceſſary to get at the wound, the part may be bathed or immerſed, if it's ſituation admits of this expedient, in warm milk and water, which will anſwer the double purpoſe of removing the dreſſing and cleanſing the wound.

The firſt dreſſing removed, the ſecond ſhould be of the ſame kind, which may be changed in twenty-four hours, and ſo continually till the wound is healed, which will happen in a very few days without any other application, if no unuſual or unfavourable ſymptoms occur.

But if any conſiderable degree of inflammation, pain, or uneaſineſs, ſhould take place, it will be neceſſary, inſtead of the wax plaiſter above recommended, to lay over the pledget of lint a poultice of white bread and milk moiſtened with a little ſweet oil, and to continue this application till theſe diſagreeable ſymptoms are removed; and if as the wound cloſes, or on the ſuppuration, any fungous or proud fleſh ſhould appear, it may be touched with a bit of blue vitriol, or a ſmall quantity of red precipitate powder, of alum burnt and powdered, or fineſt loaf ſugar powdered may be mixed with a little yellow baſilicon, and a doſſil or pledget, according to the ſituation of the wound, ſpread with it, and applied, will ſeldom fail to keep it down.

The treatment of the wounded perſon as to regimen, muſt depend on the nature, magnitude, or danger of the wound, and the habit of body and conſtitution of the patient; it is, however, neceſſary, in all caſes where the wound is conſiderable, or has been received in any part of the body where the cure may be apprehended to be difficult, to keep the patient low, both as to food and liquors, and to prevent fever and inflammation by bleedings repeated as often as circumſtances may direct, and by keeping the body open with gentle laxatives; but both the evacuations of bleeding and purging muſt be regulated by the nature of the caſe, for where the hæmorrhage has been great, or the patient is of a thin and weak habit, theſe evacuations may not only be unneceſſary, but dangerous.

A recumbent poſture has alſo been particularly recommended for wounded perſons, who ſhould be kept equally free from agitation of body and mind; all violent bodily exertions, and the indulgence of any of the tumultuous paſſions, are alike dangerous. Green wounds are in themſelves eaſily cured, if no great veſſel be lacerated or divided, and none of the vital parts are hurt; but if any degree of fever or inflammation is brought on by acts of imprudence, they are often attended with very ſerious conſequences.

And of all wounds, the cure of thoſe which are inflicted on the leſs fleſhy or muſcular parts of the body, are the moſt tedious and difficult of cure; if the perioſteum or membrane which covers the bone is wounded or bruiſed; external inflammations, abſceſſes, and a train of unfavourable circumſtances frequently enſue, attended with ſeverity of pain, and not uncommonly with caries or rottenneſs of the bone itſelf: on ſuch occaſions, the utmoſt care ſhould be taken to guard againſt theſe conſequences, by early application to poultices, keeping the body ſtill, the mind undiſturbed, and a ſtrict attention to regimen.

Though it is by no means our intention to treat particularly on gunſhot wounds, becauſe thoſe who are expoſed to ſuch accidents have in general the aſſiſtance of ſurgeons, whoſe qualifications have been examined into and approved; yet it may not be unuſeful to remark, that the foregoing part of this chapter being duly attended to, will ſuggeſt all that can be done on ſuch occaſions, ſhort of manual operations: care in examining ſuch wounds, and removing all foreign bodies, keeping them perfectly clean, and applying ſimple and eaſy dreſſings, are the great rules on which the cure of all green wounds, however inflicted, depend; and a due attention to theſe will ſupply, as far as is poſſible, the want of chirurgical aſſiſtance.

We have, in a former part of this work, treated of the tetanus or locked jaw, and other ſpaſms, convulſions, and ſtrictures, occaſioned by wounds, bruiſes, ſcratches, and punctures; and directed proper management and medical treatment, when accidents of theſe kinds are followed by ſuch dreadful effects: but it is neceſſary in this place to remind our readers not to ſlight the ſmalleſt injuries that can be ſuſtained by the human body; becauſe, however trifling they may at firſt appear, they are capable of producing the moſt excruciating pains, and the moſt deſperate diſeaſes to which mankind is liable; to avert which, it is always adviſeable to attend to any little accident the moment it has happened, and by proper applications to render theſe fata conſequences leſs probable.

Punctures in particular, though ſo ſlight as ſcarce to have been noticed at the time they have been made, have been productive of the moſt fatal events, and though a ſimple puncture of the ſkin, or even the fleſh, where the patient's habit of body is good, will ſeldom require any other application than the blood which follows it to heal the breach; yet if any of the membranes or tendons ſhould be wounded, the conſequences may prove ſerious, and thoſe ſlight feſterings, which ſometimes follow ſuch accidents, may end in extreme danger. If any pain, ſwelling, or inflammation, follows the prick of a pin, needle, thorn, or other pointed inſtrument, it is always right to apply a ſoftening poultice immediately, which will in general prevent farther miſchief.

But theſe accidents are ſometimes aggravated by parts of theſe ſmall and pointed weapons being broken and left in the wound, and the conſequences which may ariſe from ſuch circumſtances, cannot be better exemplified than by the following caſe.

CASE I.

A Maid ſervant, as ſhe was ſtooping to ſcour ſome chimney furniture, felt ſomething prick her on the outſide of her leg, juſt above the ancle; and examining the place, perceived a ſpeck of blood, but took no farther notice, apprehending ſome pin hanging in her petticoat had pricked her; and though the part ſometimes gave her pain, and occaſioned her to limp, yet ſhe followed her buſineſs for two or three months; at the end of that time, however, ſhe was ſeized with the cramp, as ſhe deſcribed it, about the calf of her leg, and an almoſt continual twitching in the membrane of the muſcles; this obliged her to keep her leg up for ſome weeks, and then a tumor appeared on the back part of the limb, which alarming the family with whom ſhe lived, and who regarded her as a faithful ſervant, they procured her admiſſion to an hoſpital, where proper means being taken to promote a ſuppuration, an abſceſs enſued, which being opened at a proper time, and the matter diſcharged, was ſoon healed, and the patient was diſcharged from the hoſpital cured, and returned to her ſervice.

But about ſix months after, ſhe began to feel the ſame pricking pain higher up in the ſame limb, which grew ſo troubleſome, that in walking any conſiderable diſtance, ſhe was obliged to ſtop ſeveral times for a minute or two at a time, and if ſhe attempted to kneel, the ſame ſenſation became ſo acute that ſhe could not endure it without crying out.

At length, the uneaſineſs increaſing, ſhe imagined ſhe felt ſomewhat deep under the fleſh, on the inſide of her thigh a little above the joint of the knee, and under this perſuaſion applied to a ſurgeon, and ſtated her apprehenſion that ſhe had ſomewhat foreign in her thigh; and the ſurgeon proceeding to examine, plainly perceived with his fingers the point of ſome hard body, like that of a pin or needle, and having got proper aſſiſtance, he proceeded to cut down upon this ſubſtance, making an inciſion half an inch long, and of the like depth, when introducing his finger he could touch it, though, the pain occaſioning the patient to change her poſition, he ſoon loſt it again; however, having forced up the fleſh and cleanſed away the blood with a ſpunge, he could not only feel it as before, but withdrawing his finger, it was actually perceptible to the ſight.

He now endeavoured to lay hold of it with the forceps, but the body was ſo ſlippery that this inſtrument would not hold it; however, with a ſmall pair of nippers from a pocket-caſe, he at length got faſt hold of it, and drew out about an inch in length of a ruſty needle. After this the wound healed ſpeedily, and the girl remained perfectly free from all future complaint.

Extraordinary as it appears, that a needle entering the fleſh below the calf of the leg on the outſide, ſhould at the diſtance of a year, when even the remembrance of the firſt complaint was almoſt loſt, be taken out on the inſide of the thigh, which could only be effected by the working or motion of the muſcles, favouring it's aſcent and winding with it in it's paſſage; yet this is by no means a ſingular caſe, many of the like kind are recorded, as well in the works of medical writers, as in the Philoſophical Tranſactions, all which ſerve to ſhew the neceſſity of examining a wound with ſtrict attention, in order to prevent the poſſibility of it's healing over ſome foreign body, which might be productive of future ill conſequences.

Another circumſtance of a ſomewhat ſimilar nature, happening within our own knowledge, we ſhall mention it as a proof how much this neceſſary caution of examining wounds is apt to be neglected, or how little attention is paid in the pretended obſervance of it.

CASE II.

SOME young gentlemen, who had been taking the diverſion of ſhooting, ſtopped in their way home at night, to take ſome refreſhment at a public houſe, and obſerving the man who kept the houſe open a cupboard in the room where they ſat, take a bottle out, carry it into the next room, and, ſoon after return it to the cupboard, which he left unlocked; either curioſity, or a ſuſpicion that it contained ſome better liquor than he had offered this company,

pany, induced one of them to take out the bottle, as ſoon as the man left the room, to examine it's contents; and as he brought it to the candle for that purpoſe, and inclined it to it's ſide for inſpection, a few grains of the gunpowder, with which it was unluckily filled, fell into the candle, which taking fire and communicating to the whole quantity, the bottle burſt with a terrible exploſion, wounding the gentleman who held it, and one or two others.

Among other wounds, he who had the bottle in his hand, received one ſo conſiderable in his neck as to occaſion a great loſs of blood; and a ſurgeon being ſent for, he uſed means to ſtop the hæmorrhage, and this with the other wounds ſoon healed, but not without leaving a very hard lump of conſiderable ſize within the ſkin, which paſſed for ſome time, as the cicatrix which had been occaſioned by the laceration of the veſſels, and the inequality of the lips of the wound, as well as the contuſion, both which muſt happen from the nature of the ſubſtance with which it was given, and the force with which it was inflicted.

However, after the young gentleman had been for ſome time engaged in the moſt active ſcenes of public ſervice, he diſcovered accidentally that the knob in his neck could not be a ſcar, as it was eaſily moveable under the ſkin, and ſhewing it to a military ſurgeon, he was convinced that a piece of the glaſs bottle had been lodged in his neck, and then remained there, but as it was at that time attended with no inconvenience, the ſurgeon adviſed him not to have it extracted, though he was of opinion it might be done at any time without danger.

After this it continued undiſturbed, and without being troubleſome, for ſeveral years longer; but at length the part grew ſomewhat painful, when it was opened by a ſkilful ſurgeon, and a piece of the glaſs bottle, nearly of the ſize and figure of a tamarind-ſtone, was taken out, and the wound healed, without farther inconvenience.

Upon examining this piece of glaſs after extraction, the edges of it on all ſides were found perfectly blunted and obtuſe, which muſt have happened in the exploſion, as it is impoſſible to account for it's ſuffering any change after it had been lodged in the patient's neck.

To what has been ſaid on the ſubject of green wounds, it may not be improper to add a recommendation to ſuch of our readers, as may have occaſion to travel by ſea or land, unaccompanied by a ſurgeon, to provide themſelves with a phial of Friar's balſam, a little of the ſticking-plaiſter already mentioned, and a proper quantity of lint, and ſoft linen for rollers and bandages; a proviſion, which will generally be effectual for the relief of ſuch leſſer accidents as commonly befal the traveller.

C H A P. III.

Of Tumors and Abſceſſes.

A Tumor (we ſpeak of an external one only) is an unuſual and unnatural ſwelling or protuberance of the fleſh on any part of the body; and is uſually deſcribed as a diſeaſe in which the parts of the body recede from their natural ſtate, by an undue increaſe of their ſize.

Different names are given to tumors

according to their ſituation, form, and contents; and theſe general names are again ſubdivided into diſtinct ſpecies, ſo that a tumor which contains matter is called an abſceſs. When the matter is contained in a bag, it is ſaid to be an encyſted tumor, and the like. Ædometous tumors are ſuch as depend on other diſeaſes, and may be ſaid to be ſymptomatical or critical, as they generally diſappear with the original diſeaſes.

It is of thoſe tumors which contain matter, and which are properly termed abſceſſes, that we mean to treat in this chapter, and theſe generally follow a certain degree of inflammation, and are ſeated in the cellular membrane.

The matter which collects in abſceſſes, is formed by the heat of the inflamed part, both acting on the humour gathered there, and diſſolving the adjacent fat; and the ſame heat ſerves to prepare thoſe two fluids for being diſcharged.

If this inflammatory heat continues to increaſe for two or three days, notwithſtanding the uſual means are uſed to remove or leſſen it, a ſuppuration may be expected to follow; and frequent ſhiverings will point out the time when the formation of matter is actually commenced.

Abſceſſes on the external parts of the body generally begin with a heat and tenſion, or ſtretching of the ſkin, and the bulk of the part ſpeedily increaſes, becomes diſcoloured, and is attended with pain and additional heat: a pulſation is now felt which continues till the matter is wholly formed, and is generally accompanied by a fever increaſing towards the evening, and proving moſt troubleſome in the night. When the contents of the tumor or abſceſs are in a compleat ſtate of ſuppuration, the ſhooting acute pain abates, and an itching, a numbneſs of the part, and a ſenſe of great weight takes place; the part at laſt yields to the touch, and grows ſoft, and the ſkin being diſtended to it's utmoſt ſtretch, breaks, and an opening is formed for the matter which it incloſed.

Very ſevere and unpromiſing ſymptoms in ſome caſes attend the progreſs of an abſceſs: the patient feels a difficulty of breathing, a total loſs of appetite, and an interruption of reſt; the matter which is diſcharged, when it breaks, is greeniſh, thin, and offenſive to the ſmell; the wound is filled with fungous or proud fleſh, and blood often burſts from it; the patient is frequently taken with faintneſs, and eſpecially whilſt the dreſſings are changed: and under theſe circumſtances danger may be apprehended, and it will be prudent to call in proper aſſiſtance, if it can be procured.

But the ordinary progreſs of abſceſſes is unattended with theſe alarming ſymptoms; the pain, fever, and diſagreeable circumſtances, vaniſh or abate very conſiderably as ſoon as the matter is formed, and when it is diſcharged by proper treatment and due applications, the wound heals without farther inconvenience; and a doſe or two of ſlight opening phyſic compleats the cure of this diſeaſe.

We have already, under the head of inflammations, pointed out the proper and ſafe methods to be uſed on the firſt external appearance of inflammatory ſymptoms, in order to remove theſe complaints and diſperſe the ſwelling; but after the formation of matter has commenced, which from the foregoing account of the ſymptoms will be eaſily diſcoverable, all repellents and ſpirituous applications muſt be laid aſide, and proper means muſt be purſued to promote the ſuppuration.

To this end, ſuch applications are to be made to the tumor as ſerve to moiſten and gently ſtimulate; and for thoſe purpoſes the common poultice of white bread and milk, with a ſmall quantity of ſweet oil, the latter anſwering the double uſe of leſſening the tenſion and obſtructing the pores;

and by that means preventing the paſſage of the finer parts in their attempts to eſcape through the ſkin, is in general the beſt that can be applied; ſeldom failing to produce the deſired effect, and being preferable to moſt others on account of it's cleanlineſs and freedom from offenſive ſmells: this poultice muſt be laid on warm, and renewed ſo frequently as to keep up an equal heat. If this application, however, ſhould not haſten the ſuppuration ſufficiently, a ſmall quantity of chopped onion, or lily root, may be added; a little yellow baſilicon, or of the pureſt gum galbanum. When the progreſs of the tumor is ſlow, and unattended with any conſiderable degree of pain, a plaiſter of purified gum galbanum laid on the part, and renewed once in three or four days, may be ſufficient; or, if neceſſary, the whole may be covered with a warm poultice, and this changed twice in the twenty-four hours.

And during the advancing ſtate of the tumor or abſceſs, due regard muſt be paid to the patient's regimen in all reſpects: if the progreſs is rapid and accompanied with heat and fever, a low and cooling diet will be neceſſary, and bleeding may be proper; and though purging is by no means adviſeable, yet it may be requiſite to keep the body open by gentle clyſters; but theſe ſhould only be uſed in caſe of actual coſtiveneſs. If the patient is of a cold low habit, and the ſuppuration is retarded by a deficiency of heat, cordial medicines, and a more generous diet, may be abſolutely neceſſary.

Before any diſcharge is admiſſible, the whole, or very near the whole contents of the tumor muſt be converted to matter, for if it be opened whilſt any part of it remains unſuppurated, that part will not digeſt without difficulty, and will perhaps degenerate into a thin, acrid, and obſtinate humour; on the other hand, if the opening be deferred after it is in a proper ſtate for a diſcharge, the matter may putrify and form a fiſtula, or be abſorbed and occaſion a hectic fever. When the ſkin on the moſt prominent part of the tumor appears thin, when the matter perceivably fluctuates on a very ſlight preſſure; and when, as has been already obſerved, the heat, pricking pain, and throbbing ceaſe, or abate very conſiderably, it may be opened without heſitation: and as nature frequently aſſiſts at the critical moment, it is certainly right not to be too forward in procuring the diſcharge, more eſpecially as it is allowed that very little of the morbid matter is depoſited in tumors before they are fully ripe, and by a premature diſcharge, a riſque is incurred of having a foul ulcer difficult to be healed.

But when an opening muſt be made by art, the choice remains between the knife and cauſtic; the former is to be preferred when the inſtrument is in ſkilful hands, as both leſs painful and more expeditious: but if the tumor be in a part of the body where any nerve, vein, or artery is in danger, this operation ought not to be attempted by any but a ſurgeon well acquainted with the ſtructure of the human body; and the only direction we can attempt to give is, that the inciſion ſhould be made on the lower ſide of the abſceſs, as moſt favourable to the preſent and future diſcharge of the matter.

Some particular tumors, ſuch as venereal buboes, and thoſe which are of a ſcrophulous nature, are ſaid to heal better after being opened with a cauſtic, than when the diſcharge is procured by inciſion; but the application of cauſtics ſhould be avoided when the tumors are in the face, neck, or other expoſed part, on account of the ſcar which they unavoidably occaſion; nor do we apprehend they ought to be applied unleſs by perſons of ſome judgment, though, in caſe of emergent neceſſity, we ſhall give plain directions for making and uſing them.

To make the common ſtrong cauſtic,

Boil any quantity of ſoap-lye till three parts in four of the liquid is conſumed; then ſprinkle in, while the remainder continues boiling, lime which has been kept ſome months in a bottle cloſely ſtopped; continue to add of this lime ſuch a quantity as to abſorb all the fluid, and reduce the whole to a paſte, which is to be preſerved in a veſſel, well ſtopped, till it is required to be uſed. The acrimony of the lime is ſaid to be leſſened by it's being kept before it is applied to the uſe of making cauſtic.

To make the common milder cauſtic,

Take equal parts of ſoft ſoap and freſh quick-lime, and let them be carefully and cloſely mixed when the compoſition is wanted for uſe. This mixture may be rendered more active or corroſive in any degree that is required, by adding a proportionable quantity of ſalt of tartar, or other fixed alkali; and in this way it may be brought to anſwer all the purpoſes of the ſtronger cauſtic with much leſs trouble.

When it is neceſſary to apply a cauſtic to an abſceſs, a piece of ſticking-plaiſter is to be laid over the ſofteſt part of it, in the middle of which a hole has been cut of the ſize the ſcar is intended to be made; in that hole the cauſtic is to be placed or ſpread on ſuch a pledget of lint as will juſt fill it; and this pledget is to be kept in it's place by another piece of ſticking-plaiſter of proper extent: this cauſtic, which may in theſe caſes be of the milder ſort, will not occaſion any conſiderable pain except the ſkin is inflamed; and the time it will take to produce it's effect, muſt depend on the nature of the tumor, and other circumſtances; when the ſcar is formed, an opening may be made in it to diſcharge the matter, and the reſt may be left to ſeparate and come away by digeſtion. When cauſtics are uſed to lay a bone bare, to deſtroy a large gland, or to waſte a conſiderable fungous, they are apt to occaſion very violent pain, which a very juſtly celebrated ſurgeon is of opinion may be leſſened by the mixture of a certain portion of opium in the compoſition.

After the abſceſs has been opened, the firſt dreſſing may be a pledget of dry lint, covered with another of tow; and if after this any warm digeſtive appears to be neceſſary, an ointment may be compoſed of yellow baſilicon, with the addition of a little oil of turpentine, or balſam of capivi; and the pledgets with this compoſition need not be warmed, unleſs the patient complains, and then not ſo much as to melt their ſurfaces. If the matter is good, it is not neceſſary to compel the patient to endure the pain of having the wound wiped clean every time the dreſſings are changed, which ſhould be as ſeldom as the diſcharge will admit; once in the twenty-four hours, or twice at moſt, will be in general ſufficient; and the leſs frequently the change requires to be repeated, the more ſpeedily will the cure be compleated: but great care ſhould be obſerved to lay on the applications evenly and ſmoothly, in doing which proper time may be taken, as the air does no injury, unleſs the expoſure be unneceſſarily protracted. The patient ſhould be directed to lie or ſit in poſtures favourable to the diſcharge of the matter, and compreſſes or bandages may be applied in ſuch a way as will moſt conduce to that end.

After an abſceſs has been opened, and during the cure, particular care is alſo due to regimen and management: the patient ſhould, if poſſible, be kept in a dry and warm, though by no means hot air; his diet ſhould be moderate, and rather low, though regard muſt be had to his habit of body, and his uſual cuſtom of living in health; the leſs exerciſe is taken the better in general, though if the head or other upper part is the immediate ſeat of the diſeaſe, the tranquillity of the body is not ſo very material; but at all events the mind ſhould be kept undiſturbed, as inflammation is the certain conſequence of any violent mental agitations or exertions; evacuations are to be avoided during the continuance of the diſcharge; and therefore if the habit ſhould be coſtive, this complaint will be better relieved by clyſters than purges: at any rate, nothing more than mild and gentle laxatives ſhould be adminiſtered.

CHAP. IV.

Of Ulcers.

THOUGH when an abſceſs is diſcharged of it's contents, it is generally ſpoken of as an ulcer, yet the latter is to be diſtinguiſhed from the former in moſt caſes by yielding, inſtead of matter, a thin watery humour, ſo corroſive as to occaſion inflammation and excoriation of the ſurrounding ſkin, by the particular hardneſs of the ſides and edges of the wound, and by it's continuance.

Ulcers are alſo diſtinguiſhed by a great variety of different names and deſcriptions; thoſe which are hollow and have cavities beneath the ſurface, are called *ſinuous* ulcers, and of this kind is the fiſtula; thoſe whoſe ſides are hardened as before deſcribed, are called *callous* ulcers; ulcers which affect the bones are ſaid to be carious; thoſe that diſcharge a thin humour, diſcoloured like water in which raw fleſh has been ſteeped, are denominated *ſanious* ulcers; when the diſcharge is more thick and glutinous, ſticking to the bottom of the wound, *ſordid* ulcers; and when the diſcharged matter is ſomewhat thinner but more abundant, theſe ulcers are ſaid to be *purulent*.

The cure of all ulcers, except in ſome particulars the callous, ſinuous, and carious, depend chiefly on the correction of the bad habit of body by which they are principally occaſioned. If the body is free from every morbid diſpoſition, the healing of an ulcer is the work of nature; and all that external applications to the part can contribute towards it, is to reduce the fibres to ſuch a moderate ſtate, neither too lax or too rigid, as to render them moſt fit for the operations of this all-powerful phyſician. Thus a ſoftening poultice will in general remove any inflammatory hardneſs, and dry lint may ſerve as the future dreſſing, unleſs ſome mild aſtringent ſhould be wanting to give a tone to the new fleſh, or gentle ſtimulatives to remedy any apparent ſpongineſs, occaſioned by too great relaxation.

In moſt caſes ulcers are to be treated as we have directed in the caſes of wounds, either from accident or from abſceſſes; but the great difficulty with reſpect to ulcers, is to determine in what particular caſes and when it is right to dry them up: on this ſubject a great variety of judgments have been formed and opinions given, but the whole ſeems to depend ſo much on particular circumſtances, as to render it impoſſible to offer any thing deciſive on a general view.

Yet it may in moſt inſtances be pronounced unſafe to dry up in the decline of life ſuch ulcers as have been of long continuance, during which the patient has enjoyed in other reſpects good health; at leaſt, no attempt ſhould be made to ſtop the diſcharge, till regimen or medicine, or the united powers of both have wrought ſuch a change in the conſtitution as to produce a viſible alteration in the ulcer itſelf, in which caſe it ought unqueſtionably to be permitted to heal without oppoſition.

On the other hand, ſuch ulcers as have been produced by acute or malignant diſeaſes, will naturally ſhew a diſpoſition to heal when the cauſes have been removed, and in theſe caſes proper evacuations will be neceſſary to prepare the way for ſtopping a drain kindly intended by nature to draw off morbid and offenſive humours.

There are alſo ulcers which have been occaſioned by the injudicious treatment of wounds, bruiſes, and contuſions, the diſcharges from which have degenerated into a thin acrid humour, and the edges become callous from neglect or improper applications; but neither ſhould any attempt be made to heal theſe without conſulting the habit of body and conſtitution, and adminiſtering proper internal medicine.

And upon the whole, it will eaſily be diſcovered whether nature requires the drain of an old ulcer, in which caſe the patient will be proportionably free from other complaints as the diſcharge is uninterrupted, and affected with them by any occaſional decreaſe of it; or whether it is unneceſſary, and therefore prejudicial, which will appear in a waſting of the patient's fleſh, a diminution of ſtrength, and a ſlow continued and hectic fever.

In the former caſe it will be neceſſary to conſider the patient's age, and every circumſtance reſpecting his former and preſent manner of life, which may lead to a perfect knowledge of his conſtitution; on this information a judgment may be formed, whether it will probably admit of ſuch an alteration as will make it a matter of prudence to heal up the ulcer, or whether the moſt likely way to prolong life will be to leave it open, and to pay no other attention to it than to keep it neat, clean, and as much as poſſible free from offenſive ſmells.

But when the patient's ſtrength appears to be exhauſting, and the other ſymptoms above deſcribed, indicate approaching danger from the continuance of the diſcharge, common reaſon will ſuggeſt the neceſſity for putting a ſtop to it; but at the ſame time the patient ſhould enter on ſuch a courſe of alteratives as may conduce both to render the drain unneceſſary, and to reſtore his weakened conſtitution.

And in both caſes, a ſtrict though ſomewhat different regimen is to be obſerved with equal attention; thoſe who retain their ſtrength and health in other reſpects ſhould uſe conſtant though not violent exerciſe, abſtain from high ſauces and ſalted and ſpiced meat, omit ſuppers, and drink little wine, and no ſpirituous liquors; animal food ſhould be uſed ſparingly, and vegetables in great variety ſubſtituted, and the body ſhould be kept open by fruits and cooling laxatives. Thoſe whoſe ſtrength is exhauſted, and their health impaired, may indulge in rather more food of the animal kind, conſiſting however of young and white meats; drink now and then a glaſs of generous wine, and eat ſuppers of biſcuit with raiſins, or other dried fruits; obſerving, however, the precaution of keeping the body open, and yet avoiding ſtrong or heating purges.

The ſea-water uſed externally and internally, and lime-water in the latter way, have been each recommended ſtrongly to thoſe who are afflicted with old and obſtinate ulcers; and we have ſeen very good effects produced by perſevering in a courſe of the former. Some writers alſo adviſe the ſublimate mercury in brandy, as preſcribed in venereal caſes, and to waſh the ſores with a liquid of the ſame kind but of ſuperior ſtrength; nor is it at all improbable that this medicine may be uſed in theſe caſes with ſucceſs, though we apprehend it ſhould not be perſiſted in whilſt the patient is affected with any conſiderable degree of fever.

As ulcers in the legs are the moſt common and frequently the moſt troubleſome complaints of this kind, it may not be amiſs to take ſome little notice of theſe diſorders, more eſpecially as the treatment and management of them is frequently miſunderſtood.

In ſome caſes thoſe who have laboured under theſe complaints have been confined to their beds, and meaſures taken to ſkin over the wounds and effect an apparent cure, which have either thrown back the morbid humours and brought on ſome acute and more dangerous diſeaſe, or as ſoon as the patient has betaken himſelf to his uſual employment, the ſame or other ulcers have burſt out and continued to diſcharge an equal or greater quantity, frequently in two or three different places inſtead of one; or the patient has been told that his life depends on keeping open the drain, and that it ought rather to be encouraged than leſſened. It is not improbable that the judgment in both caſes may be equally erroneous: theſe ulcers are generally moſt firmly and perfectly healed, when the patient continues the uſe of moderate exerciſe during the courſe of the cure; and, under proper management, the cure may be attempted in moſt caſes, except ſuch as we have already mentioned.

If thoſe who are troubled with ulcers in their legs, expect permanent relief, without medicine and without conforming to regimen, they will find themſelves grievouſly deceived; all the pretences of quacks and empiric's to cure theſe ulcers by external applications alone, are calculated to miſlead their patients, and pick their pockets. Under the directions we have already given, with the addition of a ſtrait ſtocking or bandage, theſe diſorders may in time be removed; and under theſe directions the cure of them may at all times be attempted with ſafety, with the exceptions already made.

CHAP. V.

Of Burns and Scalds.

THE former of theſe injuries is received from ſolid ſubſtances heated to a degree ſo much ſuperior to the natural heat of the body as to deſtroy many of the ſmall veſſels which connect the ſkin and cuticle or exterior covering of it together, coagulate the juices, and form a hard and dry eſchar; and the latter from water or other fluid boiling or near upon boiling, which being applied to any part of the body, ruptures many of thoſe ſmall veſſels from whence the humours are extravaſated, and being collected together, raiſe the cuticle into a bliſter.

But there is no material difference between burns and ſcalds, as to the conſideration of cure; and the danger attending each is proportioned to the degree in which the injury is ſuſtained, the part where it is received, the ſymptoms which enſue, and the habit and conſtitution of the patient.

The different degrees of burns and ſcalds may be divided according to their effects, into ſuch as produce only a redneſs in the part, attended with heat and pain; when the pain and heat are accompanied with bliſters; when the ſkin and fat are ſo burnt as to form a cruſt or eſchar, and when the fleſh is conſumed to the bone.

In the firſt caſe the cure is always at hand to thoſe who have reſolution enough to endure it; the burned or ſcalded part, if it is not bliſtered, is to be held as near the fire as it can be borne, and continued there as long as the pain can be ſuffered; when it becomes intolerable, it muſt be removed, and preſented again as ſoon as the extreme anguiſh is moderated; and proceeding in this way, the ſtagnant juices occaſioned by the too violent heat of the burn or ſcald are reſolved, and returning into the circulation, bliſters are prevented.

Thoſe who cannot ſubmit to this method of preventing farther miſchief, on account of the immediate pain with which it is attended, may in ſlight caſes dip linen rags in cold water and apply them to the part, removing them and ſupplying the place with others the moment they become hot or dry, and continuing this courſe till the part ceaſes to be painful; where the injury is of a more ſerious nature, the like application of brandy or ſpirit of wine is preferable; and upon the abatement of the pain, camphorated ſpirit of wine may be ſubſtituted. Some adviſe a mixture of oil with the ſpirit, eſpecially if the part injured is membraneous or tendinous, leſt the ſpirit ſhould criſp the part too much, and occaſion contraction.

Many other applications are recommended for ſlight ſcalds and burns, before any puſtules or bliſters are ariſen, ſuch as vinegar and ſalt, in the proportion of a handful of the latter diſſolved in a quart of the former; brine in which cabbage hath been pickled, olive pickle, white of egg beat till it becomes thin, oil of turpentine, any other cooling oil or liniment, and in particular the following:

> Take equal parts of freſh drawn linſeed oil and lime-water; ſhake them well together, till they incorporate and form a liniment. This mixture may either be ſpread on pledgets of lint or linen rags, or it may be laid on the injured part with a feather three or four times a day.

When, however, none of theſe applications can be made early enough to prevent a bliſter or puſtules, but that one of theſe ſymptoms hath actually taken place, emollients are required to relax and ſoften the hardened and ſtretched ſkin, and to admit a return of the circulation; if the cuticle, or exterior covering of the ſkin is only raiſed in bliſters, the whole bliſters, as well as the ſurrounding parts, ſhould be frequently touched with a feather dipped in freſh linſeed oil, or ſallad oil, and a plaiſter of white ointment, or white camphorated ointment, ſhould be laid over them.

To make the white ointment,

> Take of olive oil half a pint—white wax and ſpermaceti, of each one ounce and a half. Melt theſe ingredients with a gentle heat; and keep the whole ſtirring conſtantly and ſmartly, till it is cold.

To make the camphorated ointment,

> Rub a dram of camphor with a ſmall quantity of oil, and add to the above in ſtirring.

If the bliſters are of conſiderable height or extent, they ſhould be ſnipped with a pair of ſciſſars towards the lower ſide, to diſcharge the acrid humours, and prevent it's corroding; but the external coat ſhould not be taken away. After this the circumference of the bliſter ſhould be lightly touched with any cooling oil, as far as it appears inflamed, and the whole covered with a plaiſter of the white or camphorated ointment.

If an eſchar ſeems likely to be formed,

or digeftion appears neceffary, the dreffing fhould be either with yellow bafilicon and the white liniment mixed in equal parts, or with a like mixture of yellow bafilicon and epulotic cerate.

When an efchar or cruft is actually formed, fuch treatment will be neceffary to produce fuppuration and digeftion, and to keep down fungous or proud flefh and promote a cure, as has been already directed under the head of *Wounds.*

But if the injury hath been received in the face or other expofed part, every thing muft be avoided which might increafe the fcar; and to this end emollients fhould be applied on linen cloths, folded perfectly fmooth: during the firft three or four days, when the part is dreffed, a common emollient fomentation may be ufed, with the addition of about four ounces of the camphorated fpirit of wine to a quart of the liquid, and this may be continued till the feparation of the cruft, if it fhould not be effected in the time we have mentioned; though, if that delay fhould happen, it will be proper to make an opening in the cruft to difcharge the matter underneath. As the wound heals, the apprehenfions of a fcar may be leffened by expofing the part frequently to the fteam of hot water, and covering it with a foft wax-plaifter.

When the flefh is burnt away and confumed to the fkin, the wound muft be treated as in the degree laft defcribed, of which this may be confidered as a more aggravated cafe; and if it can be brought to fuppurate and digeft, a cure may be effected and defperate operations avoided. And, in cafes where the burnt parts become livid or black, fome are of opinion that it is neceffary to bathe them with camphorated fpirits of wine, tincture of myrrh, and other antiputrefcents; though it is more generally underftood to be adviseable to ufe emollients only, unlefs actual fymptoms of mortification are exhibited, when it will be alfo neceffary to accompany thefe applications with the internal ufe of the bark, and other antifeptic medicines.

And when the burn or fcald is violent or extenfive, and the inflammation threatens to run high, bleeding will be neceffary, a low diet both as to food and liquors, and laxative medicines fufficient to keep the body open; and this is more particularly requifite for infant fubjects.

The patient fhould alfo drink plentifull of cooling and diluting liquors; and if any tendency to fever appears, the following i recommended as preferable to moft othe drinks.

> Drop from ten to fifteen drops of fpirit of fe falt into half a pint of water in whic toafted bread hath been infufed, and let thi draught be repeated every fecond, third, o fourth hour, according to circumftances.

CHAP. VI.

Of Contufions or Bruifes.

WHEN any part of the human body has fuftained a contufion or bruife, either the fmall blood-veffels of the contufed part are lacerated and torn, and the blood which they contained is fpread about the adjacent part; or without fuch an eff fion of their contents, thefe veffels havi loft their tones or active force, no long contribute to the circulation, and of cour their contents ftagnate and become morbi

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both thoſe caſes frequently happen together; but in either, if the impediment is not ſpeedily removed by nature, or with the aſſiſtance of art, an inflammation enſues, and the conſequence may be an unkindly ſuppuration and a mortification. Particular injuries done to the nerves, the larger blood-veſſels, or the bones, are marked with peculiar ſymptoms.

Contuſions on the fleſhy parts may alſo bring on palſy; or a contraction, on a large nerve, a palſy, an attrophy or waſting of the fleſh, incurable numbneſs or inſenſibility of the part injured, and a gangrene in the extremities of the limb below it; and this effect may more particularly follow bruiſes or contuſions of the ſpinal or back bone, and the marrow which it contains. Contuſions of the internal parts frequently prove fatal, as they are not within the reach either of certain diſcovery or of proper applications.

In order to give effectual relief in caſes of bruiſe or contuſion, recourſe muſt be had to ſuch remedies as will be moſt likely to diſſolve the coagulated fluid, and reſtore the tone and action of the veſſels.

To this end, when the ſkin is not broken or deſtroyed in any conſiderable degree, a mixture of two third parts water, and one of ſtrong vinegar, may be warmed, and the part fomented with linen cloths wrung out of it, and renewed as they grow dry: in ſlight caſes, and when the intention is to reſtore the tones of the fibres, a ſmall quantity of ſpirit may be added to the vinegar and water, or the fomentation may be an infuſion of camomile flowers; and the cloths, as they are wrung out, may be ſprinkled with camphorated ſpirit of wine.

If the ſkin is broken, or a wound accompanies the bruiſe, a poultice may be neceſſary; in which caſe, the common one of bread, milk, and oil, is ſaid to be the beſt, though ſome recommend boiling the bread in vinegar and water, and adding to it the flowers of elder and camomile; and others, a cataplaſm of new cow's dung, with the particular virtues and efficacy of which we are however unacquainted.

If the bone is affected with the bruiſe, it will naturally follow that the part which has ſuffered injury muſt exfoliate or ſcale off before the wound can be healed; and even when the bruiſe is ſo violent as to deſtroy a conſiderable quantity of the ſubſtance, an ulcer of a very obſtinate nature frequently enſues, attended with very diſagreeable ſymptoms.

But even in theſe caſes, a rational purſuit of the meaſures adviſed in caſes of other wounds, ſimple dreſſings, conſiſting of innocent ointments, and covered with common milk and bread poultices, or ſuch others as we have already deſcribed, will in general effect a cure; for when the diſeaſed part of the bone is thrown off, and the contaminated part of the fleſh is ſeparated and brought away by digeſtion, both which will happen under proper treatment, little difficulty will be found in healing the wound.

Yet medicine and regimen are both neceſſary in caſe of a violent bruiſe or contuſion; the patient ſhould be bled as ſoon as poſſible after the accident, his diet ſhould be low and cooling, and proper means ſhould be uſed to keep his body open, either by laxatives or clyſters: as ſoon as the patient is capable of bearing it, he ſhould uſe gentle exerciſe; and when the pain and danger are at an end, purges of a more active nature are adviſeable; and for this purpoſe the volatile tincture of aloes is particularly recommended. To make which—

Take of the ſpecies of hiera picra, one ounce; of ſweet ſpirit of ſal ammoniac, or ſpirit of ſal ammoniac made with quick-lime, one pound—

pound—make a tincture. The doſe muſt be proportioned to age, ſtrength, and circumſtances; but from one table-ſpoonful to two will generally anſwer the purpoſe.

The ſpecies of hiera picra conſiſts of four parts in five of the gum of ſuccatrine aloes, and the fifth part of Winter's bark, mixed and finely powdered.

CHAP. VII.

Of Ruptures.

THE treatment of theſe diſeaſes is in general ſo difficult, and the directions which we can give on the ſubject ſo little likely to be followed with ſucceſs, unleſs chirurgical ſkill is added, that we ſhall barely mention the nature of them, and the probable means of affording relief in the early attacks of theſe complaints, and before any aggravated ſymptoms have taken place.

Ruptures moſt commonly happen to children, and to perſons advanced in years, and both in conſequence of ſome ſudden effort; in the former it may be produced by violent fits of laughing, crying, coughing, or retching; and in the latter, by any violent exertion of ſtrength in running, walking, leaping, or raiſing extraordinary weights, by which part of the inteſtinal contents of the belly are forced through the interſtices or openings left between the tendinous ſpreading of the muſcles on that part, for the paſſage of nerves and blood-veſſels, and a tumor is formed externally.

Could the parts, which have by this means changed their ſituation, be immediately returned and kept in their proper place, the diſorder would ceaſe of courſe; but when they are permitted to continue in a preternatural ſituation, they are preſſed upon by the tendons, through which they paſs, and the circulation of the blood being obſtructed, inflammation and mortification ſoon follow.

As the obſtacle to the reduction of the contents of the tumor is the increaſed bulk which it has acquired from ſtricture, by which theſe contents become incapable of returning through the paſſage by which they eſcaped, it appears that when aſſiſtance is called to the patient in time, the return of the protruded parts muſt be attempted by ſuch means as cauſe the veſſels to contract, diminiſh the bulk of the ſolid parts, and repel the fluids, ſuch as cold ſtimulating and aſtringent applications, and Goulard's ſaturnine water is particularly recommended for this purpoſe: at the ſame time the patient muſt be laid in a proper poſture, with the head thrown back, and the breech elevated with pillows or cuſhions, ſo that the return of the gut may be aſſiſted by a gentle but continued preſſure on the part with the fingers, or with ſmall pieces of linen cloth folded; and by a continuance of theſe efforts, hopes may be entertained that the veſſels will become leſs diſtended, the ſwelling more looſe and pliable, and that at length the ſtricture may give way, and the diſorder be removed; but if this happens, the return of it muſt be prevented by a proper bandage or truſs, which may always be procured from perſons who have made the invention and ſale of different kinds a conſiderable buſineſs.

Some phyſicians, however, recommend a treatment very different from that which we have juſt deſcribed. After placing the patient in a proper poſture, they direct flannels to be applied, wrung, out of an emollient fomentation, or warm water, and warm clyſters of the ſame fomentation, with the addition of butter and ſalt to be thrown up; this practice, however, ſeems to act in direct oppoſition to the foregoing, and requires ſome reaſons to ſupport it againſt the opinion of others, who have contended that emollients are abſolutely to be avoided, as they cannot relax the tendons, but may, and often do enlarge the bulk of the rupture, and render the reduction of it difficult, if not impoſſible.

When accidents of this kind happen to children, the reduction of them is not attended with the ſame difficulty as with grown perſons; the poſture we have already deſcribed will ſometimes occaſion the return of the gut without any aſſiſtance, or it may in moſt caſes be eaſily put up with a ſlight preſſure: in either caſe, it may be ſecured for the preſent by a piece of ſticking-plaiſter laid over the part, but a bandage muſt be procured with all poſſible expedition, and the return of the complaint muſt be prevented by keeping the child undiſturbed, and as much as poſſible unmoved, till the part is healed.

Grown perſons who labour under this complaint ſhould be particularly attentive to avoid exceſſes of all kinds, and particularly of liquor: whatever tends to occaſion inflammation is extremely dangerous; added to which, perſons overpowered with drink are liable to ſo many accidents, that they can hardly eſcape blows, bruiſes, and contuſions, the ſmalleſt of which happening to the ruptured part, would probably prove fatal.

CHAP. VIII.

Of Bleeding.

THOUGH of all the operations of ſurgery, this of bleeding is the moſt frequently neceſſary, yet it may fairly be allowed, that it is practiſed nearly ten times as often as it is uſeful; and though it is of all operations the moſt ſimple, yet we ſhall be juſtified in riſquing an aſſertion, that great numbers of lives are loſt, and ſtill more rendered miſerable, by the injudicious practice of it.

The fact is, that there is not a pariſh, and ſcarce a hamlet in the kingdom, where ſome barber, blackſmith, or old woman, does not offer to bleed, on terms much too reaſonable to be reſiſted, by thoſe who conſider the loſs of blood as a remedy for all diſorders; in which credulous ſet you may fairly include one half the common people of all thoſe parts of Great Britain which lie remote from cities and great towns; who, without regard to the nature of their diſeaſes, no ſooner feel themſelves indiſpoſed, than they fly to the operator, and without the leaſt information on the one hand, or enquiry on the other, of the complaints intended to be relieved, the blood is drawn, the performer gets his fee, and the patient his ſuppoſed cure; and both parties are perfectly ſatisfied, one with having probably given, and the other received, irreparable injury.

Nor is this operation of blood-letting confined to thoſe who are actually ſick: many ſubmit to it by way of prevention, and make a regular practice of loſing blood at certain ſtated ſeaſons of the year, as a ſecurity either againſt certain diſeaſes to which they ſuppoſe themſelves liable, or a charm againſt maladies of every kind.

Podalirius, a ſon or reputed ſon of the

Grecian Eſculapius, is the firſt writer who ſpeaks of this operation; which, he ſays, he performed on a princeſs, whoſe life being ſaved by it, her father, in gratitude, beſtowed her on the phyſician, with a part of his dominions as her portion; from this operator Hippocrates is ſaid to be deſcended, and to be the ſeventeenth in a lineal courſe; and he alſo bled, but not frequently: and in latter times it has been ſometimes approved, and at others diſcountenanced, till the great diſcovery of the circulation eſtabliſhed the utility of it, in certain caſes, upon the cleareſt principles.

The pulſe is in general the beſt guide, both to direct the neceſſity of taking blood and to regulate the quantity; when the pulſe is full, ſtrong or hard, bleeding will be always proper, provided this ſtate of the pulſe is occaſioned by fulneſs of the veſſels: the hardneſs of the pulſe is not, however, to be attended to ſo much in perſons advanced in years, becauſe the coats of the arteries being rigid, will produce that effect in aged ſubjects.

Bleeding is uſeful in all inflammatory diſorders, whether general or partial, external or internal. In fevers, ſuch as ardent fevers, pleuriſies, peripneumonies, and all the different kinds which are attended with inflammation; in intermitting fevers, accompanied with great heats, pains in the bowels, or delirium; bleeding may be proper in the intervals, or during the remiſſion of the fits, or on the firſt coming on or return of the hot fit; in the ſmall-pox, in the meaſles, both at the approach and decline of the diſorder; in the bilious colic, to prevent an inflammation from being brought on by the acuteneſs of the pain; in all inteſtinal inflammations, as well as thoſe which affect the throat, eyes, and other exterior parts; in the bloody flux, pains in the ſide and head, apoplexy, epilepſy, rheumatiſm, ſciatica, coughs, and aſthmatic complaints; in the gout, under certain circumſtances; in pregnancy, during the firſt and laſt three months, bleeding is frequently proper, notwithſtanding the opinion of the ancients, that it was prejudicial in any part of that ſtate; when the piles are evidently occaſioned by fulneſs of the veſſels, they ought to be emptied by bleeding; and a ſuppreſſion of the proper diſcharges after child-bearing will be relieved by the ſame means. After concuſſions of the brain, and all other blows and bruiſes, bleeding is of eſſential ſervice; and in ſome caſes, but not all, where the vital powers are ſuſpended by drowning, ſtrangulation, and other accidents; but, in the caſes laſt mentioned, when it appears neceſſary to draw blood, it ſhould be done with a cautious hand, as it ſometimes proves dangerous when the patient is much exhauſted.

But there are caſes in which bleeding will not only prove ineffectual, but highly prejudicial; ſuch are diſorders occaſioned by relaxation or impoveriſhment of the blood, general weakneſſes and ill habits, nervous and hyſteric complaints, dropſies, and thoſe ſuſpenſions of life during faintings and ſwoonings, which are brought on by any univerſal debility.

And, indeed, ſome knowledge and attention is not only neceſſary to point out the particular diſeaſes, and the ſeveral ſtages of them, in which bleeding may be of uſe, but even to ſtop the current of blood, or to ſuffer it's flow to be continued after a vein hath been already opened; and for this purpoſe, in many diſeaſes the pulſe ſhould be conſulted during the operation, and the proceſs of it diſcontinued, or protracted, according to the judgment that may be formed from the intelligence gained in this way.

Though ſome anatomical knowledge is neceſſary for the judicious performance of this operation, and though we do not conceive that ſuch inſtructions can be conveyed to the reader as will enable him to undertake it with ſafety, until he has had practical experience, yet we apprehend it may be proper to give ſome hints on this ſubject, what we rather intend as perſuaſives to caution, than recommendations to try practice, without ſufficient and well-grounded judgment.

The arteries are diſtinguiſhed from the veins by their beating, the latter having no ſenſible pulſation: the blood in the arteries is of a more lively, florid, ſcarlet colour, more ſubtile and ſpirituous than that which is contained in the veins; and when an artery is cut the blood ſprings out at intervals, and does not flow in a continued ſtream like that from the veins. The arteries lie more deeply concealed than the veins, which are found near the ſkin.

Opening the veins is attended with no danger, if nothing is wounded beſides theſe veſſels; but the puncture of an artery is attended with very diſagreeable conſequences, the blood being ſtopped with extreme difficulty, and frequently bringing on aneuriſms, which too often terminate fatally. When the artery lies deep, the wounding it is ſtill more dangerous, becauſe neither ligatures or ſtyptics can be applied.

On the arm are ſeveral different veins, and various branches from each of theſe, which may be opened with ſafety; on the hand two, one between the thumb and fore-finger, and the other between the two laſt fingers; on the leg and foot are alſo ſeveral, which may be bled even as low as the junction of the great toe with the foot.

But beſides the veins in the limbs, there are others in the ſuperior parts of the body from which blood is frequently drawn; ſuch as the vein in the middle of the forehead called the *frontal vein*, the veins in the angle of the eye, and between the cartilages of the noſe, for pains and inflammations affecting theſe particular parts; the veins on each ſide the lower part of the tongue, in ſevere inflammations of the throat, or violent pains in the teeth; and the jugular veins in the neck in apoplexies, or other violent ſeizures in the head, in inflammations of the eyes, and quinſies, or other inflammatory ſwellings of the throat.

And in violent head-aches, or other attacks of that kind, the temporal arteries are ſometimes opened; but this muſt be done by a ſkilful hand, and the orifice made lengthways to avoid dividing their fibres, which may be attended with very diſagreeable conſequences.

In opening veins in the hands and feet, theſe extremities ſhould be immerſed in water as hot as the patient can ſuffer it, which tends as well to ſoften the ſkin as to raiſe the veins; and in order to aſcertain the degree of heat which the patient can endure, the part may at firſt be plunged into water which is only warmed, and hotter added by degrees, till the patient complains.

The poſture in which the patient ſhould be placed for bleeding muſt depend on his ſituation, and the part in which the vein is to be opened. The operation will be moſt eaſily performed if the patient ſits in a chair; but in ſome caſes the nature of the diſeaſe does not admit of this choice, and in others the patient being ſubject to faint, it is neceſſary that he ſhould be placed in a recumbent poſture. And it is generally adviſed not to draw blood on a full ſtomach, as the faintneſs which it frequently occaſions is apt to bring on a vomiting, which may in ſome caſes produce diſagreeable conſequences.

From all that has been ſaid, it will be inferred, that bleeding is the buſineſs of perſons of ſkill and judgment; that however neceſſary the operation may be, it is extremely dangerous to admit it to be performed by ſuch as are ignorant and unqualified; and that this danger is enhanced by the probability that under ſuch hands blood may be ſo improperly drawn as to injure the patient very materially, inſtead of rendering ſervice to him.

It would be an inſult to the underſtandings

ings of thoſe who ought to be intruſted with the performance of this operation, to ſuggeſt the neceſſity of proportioning the loſs of blood to the age, conſtitution, habit, and even ſize, of the patient: no one can be at a loſs to know that a greater quantity of blood will be contained in a large body than a ſmall; nor will ignorance itſelf ſuggeſt an idea of bleeding a giant and a dwarf in equal quantities.

But it may be right to remark, that the practice of bleeding in particular parts of the body, and thoſe neareſt the part affected, for peculiar diſorders, and in particular for topical inflammations, ſeems rather to be a cuſtom founded on very ancient uſage, than to be juſtified by any well-grounded reaſon; whoever conſiders the velocity with which the courſe of circulation is performed, will readily admit that bleeding in any unuſual part is not worth the inconvenience with which it is attended.

CHAP. IX.

Of Fractures.

THOUGH we do not mean to recommend to ſuch of our readers as are not of the chirurgical faculty to commence bone-ſetters, too many unſkilful practitioners of this kind being already to be found in almoſt every part of Great Britain; yet, as proper aſſiſtance is not always to be procured immediately, and ſometimes hardly at all, ſome directions with reſpect to fractures in general, and a few hints on particular caſes of this kind, may be uſeful in the interval after the accident and before ſuch help can be procured; and, if properly attended to, may reſcue from future miſery thoſe who are in ſuch ſituations as not to have it in their power to procure ſurgeons at any rate, which may happen to ſailors and paſſengers on board common merchant ſhips, and in other exigencies of the like kind.

Fractures receive different denominations according to the different directions, being called *tranſverſe*, *oblique*, or *longitudinal*, according to the form in which the bone is injured. When one bone only is broken without any external wound of the ſkin, it is ſaid to be a *ſimple fracture*; when two bones are broken, ſuch as the greater and leſſer bones of the leg, or the like, or when a fracture is accompanied with an external wound, or a diſlocation, it is called a *compound fracture*: and the power of nature is wonderful in producing a new bone, for the reunion of the ſeparated parts is actually formed by a renewal of the organical ſtructure of the bone itſelf, and not by a glutinous matter hardening into what is uſually called a *callus*.

Speedy cures in fractures are not always to be promiſed; circumſtances ſometimes occur which prevent the immediate reunion of the fractured bone, which notwithſtanding may unite at laſt: thus, when a pregnant woman meets with an accident of this kind, the cure is not always to be effected till after delivery; but this is by no means a general rule, happening only in particular caſes. A bad habit of body, when it is affected with ſcrophulous, ſcorbutic, or venereal taints, may prevent the reunion of the bone, or it may be retarded by a caries or rottenneſs of the bone. If the fractured limb ſhould be attacked by the palſy, or waſting of the muſcular parts, the cure is doubtful; at beſt, it can only be expected to be ſlow: if the particular part is afflicted with an old ulcer, it ſeldom or ever unites; and fractures in thoſe bones which lie near the brain, the ſpinal marrow, or the inteſtines, are attended with extreme danger.

If a ſurgeon ſhould be called after the ſwelling hath commenced, or a violent inflammation is come on, the extenſion of the limb muſt be deferred until they are removed; but if theſe ſymptoms are ſlight, the extenſion will prevent their increaſe. If there is a wound, all foreign matters ſhould be removed at the firſt dreſſing, if it can be effected; and all ſtrictures and ligatures made eaſy; if the wound is too ſmall, it ſhould be dilated, and if poſſible this ſhould be done before inflammation comes on, for then the parts become more ſenſible. If it can be contrived that the matter may have a depending diſcharge from the wound, all danger from abſorption will be avoided; but this muſt be done without altering the relaxed part of the limb, which is of ſuch importance, that hardly any thing ſhould interfere with this particular. If a bone is thruſt through the ſkin, it is better to ſaw off a part, than to permit the matter to lodge ſo as to be abſorbed; this operation is but very little troubleſome to the patient, but the lodging of the matter is extremely ſo. If a diſlocation accompanies a fracture, this ſhould be reduced firſt, and afterwards the fracture; though if the fracture is very near the head of the diſlocated bone, the fracture muſt be reduced, and the bone united, before any attempt is made on the diſlocation.

When a ſimple fracture happens, it muſt be reduced, and the limb laid eaſy as ſoon as poſſible; then a cataplaſm of oatmeal, oil, and vinegar, is to be applied; or, as a ſubſtitute, a plaiſter of white cerate. The bandage with eighteen tails is the beſt both in ſimple and compound fractures; it is more commodious than the roller, as it allows of viewing the limb without diſturbing it. At the concluſion, if the leg is in a ſwollen ſtate, the laced ſtocking is the beſt, and rubbing it daily with the flannel, or a fleſh-bruſh, will reſtore the plumpneſs of the calf.

Compound fractures are often attended with mortification; but this ſhould not haſten to amputation. As ſoon as any tendency to this ſymptom appears, an antiſeptic fomentation, in which ſal ammoniac is diſſolved, ſhould be made uſe of, and the wound dreſſed thrice a day, the part being wrapped up with the cataplaſm of cumin; bladders of warm water, one-third or half full, ſhould be applied to keep up a proper warmth from dreſſing to dreſſing; beſides theſe, the bark joined with rhubarb may be given; or, according to circumſtances, with nitre, and in other caſes with camphire, volatiles, and ſnake-root.

To make the cataplaſm of cumin—

> Take of cumin ſeeds half a pound—bay-berries, the leaves of water germander, and Virginia ſnake-root, of each three ounces—of cloves, one ounce. Powder the whole ingredients, and make them into a cataplaſm, with thrice the weight of honey.

It is in moſt caſes proper to bleed the patient as ſoon as poſſible, and to repeat the operation as circumſtances may direct; to young, full, and florid habits, this evacuation will be moſt neceſſary; eſpecially if the fracture hath been accompanied with any wound, contuſion, or bruiſe.

And thoſe who meet with misfortunes of this kind, ſhould be treated in all reſpects as thoſe who are afflicted with inflammatory fevers: the diet ſhould be light, low, and cooling; the liquors diluting; and the body ſhould be kept open by giving tamarinds, ſtewed prunes, roaſted apples, or the like, rather than by clyſters, which cannot be adminiſtered without pain and inconvenience. If, however, the patient's ſpirits ſhould fail, and he falls too low, he may be indulged with a ſmall quantity of wine, or ſuch other liquor as he is accuſtomed to in health, provided his body is not in a feveriſh ſtate; and, above all things, cleanlineſs, and ſuch eaſe as may be procured by ſupplying him with ſmall pillows and bolſters under thoſe parts of the body which bear moſt on the bed, in a lying poſture, will contribute very conſiderably to the ſpeedy cure.

Nor is it neceſſary to keep the patient ſix or ſeven weeks on his back, at the expence of his peace of mind and eaſe of body, in order to effect the cure of a fracture. If care is taken to prevent ſuch galls and excoriations, as occaſioning ſtarts in the ſleep and perpetual endeavours to change poſtures when awake, endanger continually the ſeparation of the uniting limb, the patient may be gently and carefully raiſed in his bed, and remain in a ſitting poſture ſome hours every day; but he ſhould be lifted up by others, the practice of faſtening cords or ribbands to the bed-poſts, and permitting him to aſſiſt himſelf in obtaining a ſitting poſture, being attended with ſome danger that the bone may be diſplaced by the action of the muſcles, which are univerſally affected by ſuch exertions.

In a fracture of a limb, if, after the part has been extended and the bone properly placed, it is ſecured by ſplints of paſteboard or ſtiffened leather, of the length of the fractured limb, and ſhaped to the part they are intended to ſupport, and theſe are fixed by the eighteen-tailed bandage already mentioned, and the whole limb is then laid in a proper cradle, of which every ſurgeon is poſſeſſed, or the abſolute want of which may be ſupplied by a flat ſtrong board, with hoops nailed over it, and pillows properly diſpoſed to receive the fractured part; the patient may be taken out of bed as ſoon as the fracture is ſuppoſed to be tolerably united, the machine which contains the limb being carefully moved with him; and this will not only tend to the recovery of his ſtrength generally, but the injured limb will receive particular benefit, and the cure be compleated much more ſpeedily, than if the patient remained longer wholly in bed.

Fracture of the Leg.

IN the leg there are two bones; the *tibia*, which is the larger bone, and the *fibula*, which is the ſmalleſt. The tibia is generally fractured near it's lower extremity, where it is weakeſt; and often, when this large bone is broken, the ſmaller ſuffers the ſame at it's other extremity. The fibula is alſo for the moſt part fractured when there is a diſlocation of the inſide ancle.

A fracture of the ſmall bone ſeldom gives any uneaſineſs, or hinders from walking; however, it may be diſcovered by taking hold of the leg under the bone with one hand, and with the other moving the foot; for thus the hand which holds the leg will diſtinguiſh the fracture. In this caſe, a tight bandage upon the fractured part is not to be admitted; but if it is applied to the two extremities, the broken ends will be brought into contact, and thus the cure will be effected.

When the great bone is fractured, the patient ſhould be laid on the injured ſide, on a flat ſurface, and the knee of the fractured limb is to be gently raiſed towards the belly, at the ſame time bending the joint of the knee; by theſe means the extending muſcles of the foot are relaxed, and the extenſion required to reduce the bone will be performed with eaſe. Having replaced the fractured bone, a long ſplint, padded with tow, muſt be applied to the ſmall bone, and another on the inſide of the great bone; and they are to be ſecured with the eighteen-tailed bandage. The patient may lie on the injured ſide during the cure, and in this way a cradle or fracture-box may be rendered unneceſſary; the knee may alſo continue in the ſame poſture as that in which the fracture was reduced.

A fractured Thigh.

IT has been obſerved, that when either the bone of the upper arm or of the thigh breaks inwardly, a worſe train of ſymptoms follow than when the ſame happens outwardly, becauſe of the greater number of veſſels and nerves lodged in their inner parts.

When the thigh is fractured in it's middle or lower part, it's reſtitution may be effected by the hand; but when the accident happens on the upper part, a greater force is generally required. Wherever the ſeat of the fracture is, the poſition of the patient and of the limb to be reduced, ſhould be ordered as in the caſe of a fractured leg; then, a due extenſion being made, and the ends of the fractured bone replaced, ſplints, properly padded with tow, muſt be ſecured; and if a machine of modern invention for fractures of the thigh-bone is made uſe of, little more than patience will be required in order to the cure; but when this machine is not to be had, the poſition propoſed when the leg is fractured may be truſted to, and this particularly when the neck of the thigh is the ſeat of the accident.

If a fracture of the thigh is complicated with a wound, it is attended with great danger; happening near the joints, it is uſually fatal, the large blood-veſſels being in that caſe too frequently lacerated. The danger is not much leſs if the wound is in the back part of the thigh, becauſe of the difficulty of dreſſing it. When the hæmorrhage can be reſtrained by the tourniquet, and the wounded veſſel can be taken up, the fracture may be reduced; but if the bone is much injured, and the hæmorrhage violent, the loſs of the limb ſeems the only expedient to preſerve life.

When a fracture happens of the neck of the thigh-bone, it is ſometimes miſtaken for a diſlocation; but this bone is more eaſily broken than diſlocated: and fractures in it's neck are more common than in it's other parts. A fracture in the neck of this bone is both reduced and retained in it's place with more difficulty than in the body of it, and the re-union is ſeldom effected without leaving a lameneſs: and theſe difficulties are occaſioned by the oblique direction of the neck, with the quantity and ſtrength of the muſcles.

The ſigns of this kind of fracture are, according to anatomiſts, the thigh and knee turning outwards; the limb is much ſhortened, and conſiderably ſhrunk; pain is felt in the courſe of the great muſcle which partly ſurrounds the thigh; and which, from it's origin and inſertion, muſt frequently be put upon the ſtretch, often affecting the inſide juſt below the knee, and a crackling is obſerved when the patient moves his limb: when theſe ſymptoms appear, the limb being gently but ſteadily extended, until that which has received the injury appears as long as the ſound one, the patient ſhould be laid in the poſture above recommended when the leg is the part thus affected, and ſecured in like manner; and bleeding and other means ſhould be employed to prevent or to remove inflammation. A machine has alſo been invented for extending this limb, and keeping the poſition of it; and when this can be obtained, it is the moſt eligible method for preventing future inconveniences.

A fractured Upper Arm, between the Shoulder and Elbow.

IF the bone of this part of the arm is fractured in the middle, no great difficulty attends; but if near the head and on the outſide, it is ſometimes attended both with pain and danger. To reduce this fracture, the patient is to be placed on a chair; his elbow being bent, an aſſiſtant ſhould ſteadily graſp the fractured bone at it's lower end, and another perſon do the ſame a little below the ſhoulder; then the arm being extended gently, the operator muſt take up the fractured part in his hand, and as ſoon as the extenſion is ſufficient, the bone being thereby replaced, ſplinters and a bandage are to be applied, and the arm hung in a ſling.

It ſometimes happens, that when the fracture is oblique, the ſharp ends of the bone are ſo entangled in the adjacent muſcles as to prevent a re-union; but an inciſion being made upon them, and the points ſawed off, an eaſy way may be found of replacing them, and a ſpeedy cure effected.

Fracture of the Collar-Bone.

WHATEVER part of the collar-bone is broken, the part which joins the ſhoulder-blade deſcends below that which is fixed to the breaſt-bone, on account of the weight of the arm. When this bone is fractured, the patient cannot lift up his arm, but it hangs inclined towards his breaſt; and in a ſlight motion of the upper arm, the fracture in the collar-bone will be evident to the touch, ſight, or ear, or all of them. This fracture is eaſily reduced, but it is attended with conſiderable difficulty to retain the bones in their proper ſituation. To reduce the fracture, an aſſiſtant ſhould place his knee between the ſhoulder-blades of the patient, then with his two hands draw the ſhoulders back, in which way the collar-bone will be extended; the ſurgeon, or other operator, ſtanding before the patient, muſt then reduce the ends of the bone to their proper poſition: this done, a narrow but thick bolſter ſhould be applied above and below the collar-bone, to fill up the cavities; upon theſe, two other narrow bolſters ſhould be laid, in the form of the letter X; and over theſe a piece of thick paper, moiſtened with vinegar; then a wad of tow, or a ball made of ſoft rags, ſhould be placed under the arm-pit, next to where the fracture is, to ſupport the ſhoulder; after this, the bandage muſt be applied ſo as to keep the fractured ends from moving, and the arm muſt be ſuſpended in a ſling fixed about the neck.

Fracture of the Arm, between the Elbow and the Wriſt.

THIS part of the arm hath two bones: the *radius*, which is the upper and rather the larger; and the *ulna*, which is the lower and ſmaller. Fractures here are diſcovered by the ſight, touch, and ear; by the touch and ſight, by moving the hand of the injured arm inward and outward; though a fracture in the lower bone, from it's inability to ſupport the joint, will ſhew itſelf ſooner than that of the upper: the ear diſcovers a grating noiſe, if the elbow is held ſteady, and the hand is moved inward and outward.

If the upper bone is to be reduced, and the fragments have receded towards the lower, ſome perſon ſhould ſtretch the arm, and the ſurgeon ſhould preſs down the patient's hand until the depreſſed part is elevated; after this, the arm is to be compreſſed on each ſide with the palms of the hands, ſo as to reſtore the conſtricted muſcles, and the fragments of the fractured bone, to their natural poſition; then a compreſs and ſtrong paſteboard is to be laid upon the forepart of the arm, to prevent the fractured bone from being drawn toward the ſound one; after which the circular bandage is to be applied, and the arm hung in a ſling, with the hand in a depending ſituation.

If the other bone is fractured, the proceſs ſhould be the ſame as when the accident happens to that already deſcribed; only remembering to turn the hand towards the contrary way, until the depreſſed part of this bone has recovered it's former poſition.

When both theſe bones are broken, the management is to be the ſame as with either of them ſingly; but in this caſe it is neceſſary to put longitudinal compreſſes, as near as may be, betwixt the bones, in order to prevent the callus uniting them, which would hinder the circular motion of the arm.

A fractured Knee-Pan.

WHEN only a ſmall fragment of this bone is attracted upwards, if the patient is fat, it is not very eaſy to learn his caſe. In ſearching to diſcover whether the knee-pan is broken or not, the knee muſt not be bent, becauſe that motion will ſeparate the fragments farther from each other, and occaſion unneceſſary pain. This bone is generally broken tranſverſely, the lower part remaining fixed at the knee; but the upper being drawn by the muſcles on the forepart of the thigh. When the cure is aſcertained, the patient muſt be laid on his back, his leg extended, and the muſcles gently preſſed above the fractured part downwards, until the fragments of the bones approach within an inch of each other; in this ſituation they are to be retained by a compreſs and bandage. The fractured parts ſhould never be brought cloſe together, for this would occaſion a ſtiff joint.

Sometimes the ligament which ſecures the knee-pan to the greater leg-bone is broken, and this caſe is miſtaken for a fracture of the knee-pan; however, the miſtake is not of much conſequence, as the management and method of cure are nearly the ſame in both caſes.

Fractures of the Ribs.

WHEN the ribs are broken, and their ends ſeparate from each other, if they project outward, no conſiderable damage enſues; but if they preſs inward, they produce an uneaſy pricking pain, inflammation, cough, fever, abſceſs, ſpitting of blood, and other diſagreeable complaints; and the cure is generally compleated by applying an exact uniform circular compreſſive bandage, if neither inflammation nor ſwelling forbid; but when a bandage cannot be uſed with ſafety or propriety, a ſtrong adheſive plaiſter, ſpread on leather, may be laid over the part; and the patient ſhould keep his body in as even a poſture as poſſible, avoiding all manner of exertions, and as much as may be, the agitations occaſioned by coughing, laughing, or the like. In theſe caſes it is generally proper to bleed, to confine the patient to a low diet, and to preſcribe plenty of diluting liquors, as well to prevent inflammation, as to act as an internal fomentation.

Fractures of the Skull.

WHEN, from any external violence, this injury is ſuſtained, it is generally attended with loſs or faultering of ſpeech, a total or partial deprivation of ſenſe, a lethargy, convulſions, and other ſymptoms of the like kind; but as theſe ſigns may be the effect of an extravaſation of matter on the brain, or of a concuſſion as well as of a fracture, no certain concluſions can be drawn from them. To diſcover, therefore, if a fracture has actually taken place, it will be neceſſary to make an inciſion upon the part where the injury was received; if, upon making the inciſion, you find the pericranium, or membrane which immediately inveſts the bones of the ſkull, looſe, you may certainly conclude there is a fracture. In examining for a fracture, care and judgment is required to diſtinguiſh it from a ſuture, or ordinary joining of the bones in this part: however, if, upon ſcalping, the pericranium is found firmly adhering to any part that reſembles a fracture, we may be aſſured that it is only a ſuture; but if the pericranium eaſily ſeparates, the caſe is a fracture. If, when the head is ſhaved, you can feel the pericranium under your finger to be looſe, this points out the caſe ſtill more clearly.

If a fracture happens on the ſkull, ſome ſurgeons immediately uſe the trepan, with a view to prevent the fragments of the broken bone from irritating the dura mater, or membrane which covers the brain within the ſkull; but others of great eminence forbid it's uſe, except when a part of the ſkull is depreſſed, and recommend deferring this operation till the approach of unfavourable ſymptoms, and when theſe do not increaſe or become alarming, not to proceed to inciſion and perforation; but, after bleeding, to attempt the cure by often repeated application of warm cephalic fomentations. And a modern practitioner, of great reputation hath preſcribed the following treatment in concuſſions of the brain, and hath found it ſucceſsful in ſome caſes where the ſkull was actually fractured.

The patient is firſt directed to bleed, if neceſſary, and the bowels to be cleared by a common clyſter; a ſcruple, or leſs, according to age, habit, and conſtitution, of Dover's ſweating powders, is then to be adminiſtered in any proper vehicle, the patient being laid between blankets, and the ſweat kept up by ſuch doſes of antimonial wine, mixed with liquid laudanum, as may be found neceſſary, which may be ten or fifteen drops every four or ſix hours, till the violent ſymptoms abate, and the patient enjoys ſuch a freedom from complaint as to need no farther aid of the kind. If the violent ſymptoms are not allayed by the firſt doſe of the powder, it is to be repeated, or if they ſhould return after they have once abated.

A Fracture of the Noſe.

THE bones and cartilages of the noſe, are frequently broken by falls and other accidents; and to diſtinguiſh which is the caſe, it may be obſerved, that when the bones are broken, the noſe appears flat in the fractured part; but if the cartilage is injured, the noſe inclines to one ſide. If the injury is conſiderable, there is danger of an ulcer, a polypus, or a rottenneſs of the bone, and the cure is difficult: in leſs aggravated caſes, it may be attempted by placing the patient's head in a poſture declining backwards, and raiſing the depreſſed parts of the noſe with a quill thruſt up the noſtrils with one hand, and at the ſame time replacing them in their proper poſitions, with the finger and thumb of the other. After this is done, the noſtrils may be ſtuffed with lint, or a tube of ſilver may be introduced to keep the parts from being again diſplaced, and the whole may be ſecured with a plaiſter: if the noſe has received any external wound, it muſt be healed in the uſual way; and if any part of the bone be actually detached or ſplintered, ſo as to make it's re-union difficult, it ſhould be taken away.

CHAP. X.

Of Diſlocations.

A Diſlocation is the removal of any bone received into a cavity of another, from it's proper ſeat to another ſituation, by which means voluntary motion is obſtructed; and diſlocations are divided into ſimple or compound; the former, when they are attended with no particular circumſtances; the latter, when they are accompanied with wounds, fractures, contuſions, or other marks of violence.

Diſlocations may proceed from external or from internal cauſes; and thoſe from internal cauſes are known by the following ſigns. The limb is ſo relaxed that it may be eaſily moved in any direction; there is a cavity about the joint, and a hollowneſs between the bones, which may be felt with the fingers. The diſlocated bone may eaſily be replaced, but ſoon ſlips out again ſpontaneouſly, becauſe of the weakneſs of the ligament and muſcles. The diſlocated limb is longer than the ſound one; no pain, inflammation, or convulſion, attends a diſlocation of this kind, which happens generally to the upper part of the thigh or arm-bone, and ſometimes in the articulation of the foot with the greater bone of the leg. When a diſlocation happens from an external injury, the ſigns are ſometimes uncertain, becauſe a violent contuſion or diſtortion may occaſion a ſwelling of the joint, which, with the pain, will render the evidences of a diſlocation doubtful: in ſuch caſes, the judgment muſt be ſuſpended; and, indeed, if it could be poſitively determined that a diſlocation had happened until the inflammation and ſwelling had in a great degree given way, attempts towards a reduction would be improper; however, the moſt ready way to diſcover a diſlocation is to obſerve that when the head of the bone is removed out of it's place, the other end will be diſtorted in an oppoſite direction, for when the higher end is outwards, the lower will be inwards, and ſo the contrary; and that generally a protuberance is obſervable where the diſlocated part of the bone is ſeated, and an hollowneſs in the part from whence it receded; though, where there is much fleſh, the ſwelling and cavity are not ſo perceivable.

Various ſymptoms are produced by a diſlocation, but theſe are ſomewhat different, as the parts differ in which the accident hath happened; in general they are a total or partial incapability of moving the diſlocated limb; an extenſion of ſome of the adjacent mucles, and a relaxation of others; an inſenſibility of the adjacent parts; a compreſſion of the adjoining veſſels, which may occaſion an atrophy, or a mortification, pain, convulſion, abſceſſes, and the like.

Compound diſlocations are more dangerous than compound fractures; and the worſt diſlocation of all, is that produced by a ſolution, or a ſeparation of the head from the body of the bone, to which it is joined by an intervening cartilage, which in grown perſons is hardly diſtinguiſhable from the bone itſelf; but other difficulties and uncertainties are to be apprehended from the largeneſs of the diſlocation or the diſtance of the diſlocated bone from it's proper place; the figure of the diſlocated limb, and the part in which the diſlocation is ſeated; the parts preſſed or intercepted; which in different circumſtances may occaſion pain, inflammation, and other violent ſymptoms.

The objects to be attended to in the cure are, to reduce the diſlocated part, and to retain it in it's proper ſituation: but if the inflammation or ſwelling are conſiderable, theſe muſt be removed, or very conſiderably abated before the reduction is attempted. In reducing diſlocations, the muſcles ſhould all be put into a ſtate of the greateſt relaxation poſſible; as the reſiſtance of the muſcles is the principal cauſe of the difficulty of reducing diſlocations, much force is never required, provided the muſcles are relaxed by a proper poſition of the limb; and in recent caſes at leaſt, the ligaments which covers the head of the bone will rarely, if ever, impede the reduction. The extenſion ſhould be gradual and continued, until the diſlocated bone is on a level with the cavity from whence it has been diſplaced; at which time, if the head does not return of itſelf, it muſt be aſſiſted by preſſing upon it, and directing the diſlocated bone. Some anatomiſts ſeem to think that the conſtruction of the muſcles is rarely an impediment to the reduction, but the rupture in the ligament above deſcribed; however, a gentle extention is univerſally recommended, and to avoid every violent effort.

A Diſlocation of the Collar-Bone.

WHEN this accident happens, the ſooner the reduction is performed the better, for old diſlocations of this kind are ſeldom compleatly cured.

The collar-bone may ſlip from the breaſt-bone, either outwardly or inward; in the firſt caſe, an unuſual ſwelling is obſerved about the joining of the bones; in the latter caſe, a cavity is obſerved in the part affected; the wind-pipe, the carotid arteries, or thoſe which paſs by the throat to the temples, the contiguous nerve, and the gullet are ſqueezed: as to the reduction of this bone in theſe caſes, the ſame general methods will ſuffice which are laid down in caſe of a fracture of it, when that accident hath happened near the breaſt-bone; the like may be alſo obſerved with reſpect to a diſlocation happening next to the ſhoulder-bone.

A diſlocation of the collar-bone happening next the ſhoulder-bone, is ſometimes not eaſily diſtinguiſhed from a diſlocated upper-arm; but in this caſe the upper part of the collar-bone protuberates upwards, and a hollow or cavity is obſerved in the part where that bone is ſeparated from the ſhoulder-bone; violent pains alſo attend, and the patient cannot move the arm upwards; if in this caſe the reduction is not ſpeedily effected, the arm will moſt probably ſoon be attacked by a palſy.

In ſecuring diſlocations of this bone, bandages are to be uſed with the utmoſt care, as any neglect in this particular may leave a ſtiff or ſtill diſlocated arm; if the bone is diſplaced near the breaſt-bone, and is ſtarted outward, beſides bolſters to keep down the end of the bone, the capeline bandage, or that with two rollers, ſhould be uſed; but if inward, the ſtellate or croſs bandage is to be preferred, on account of it's keeping the ſhoulder back. If the diſlocation is next the ſhoulder-blade, the common bandage or roller with two heads may be uſed, and if both collar-bones are diſplaced, the double-headed bandage will be alſo required.

A Diſlocation of the Upper-Bone of the Arm.

THE head of this bone may ſlip out before, behind, (even under the blade bone) or downward; but never upwards except the top of the ſhoulder-blade, and that proceſs of it which is called the coracoid, are fractured.

When the upper arm-bone is diſlocated downwards, there is a cavity in the upper part of it perceptible to the eye in ſome inſtances, but to the finger in all, and a protuberance or ſwelling in the arm-pit, becauſe there the head of the bone is lodged; the diſlocated arm is longer than the other, and when it can be moved or extended, it gives exquiſite pain in lifting it up to the mouth.

Diſlocations of this bone are moſt eaſily reduced ſoon after the accident; thoſe of long ſtanding are reſtored with difficulty; but if the head of this bone grows to the adjacent parts, a reduction can by no means be effected.

To perform the reduction, the fore-arm is to be bent, and an aſſiſtant muſt ſupport it; then the arm is to be elevated, ſo that the elbow may be advanced ſomewhat above the ſhoulder, bringing it a little inward; a proper extenſion is now to be made by one aſſiſtant, whilſt another, counteracting him, draws the lower angle of the ſhoulder-blade backward toward the ſpine, and preſſes the top of the ſame bone downwards; the operator with his fingers in the arm-pit preſſes the head of the bone upwards as ſoon as he perceives the extenſion to be ſufficiently made, and at the ſame time with his other hand, brings the elbow of the diſlocated arm to the patient's ſide; an extenſion made downward, or even horizontally, more frequently fails, than when it is made in ſome degree upward.

Some ſurgeons uſe a napkin, which is brought under the patient's arm and tied over the operator's neck; and in this way the reduction of the bone may be facilitated.

When the diſlocation is forward, ſo that the head of the arm-bone is under the great muſcle of the breaſt, which is commonly called the pectoral muſcle, there is a cavity under the ſhoulder-bone; but the head of the diſlocated bone projects toward the breaſt more than when it is juſt in the arm-pit; and if the arm is moved, a more acute pain is felt than in the preceding caſe, for the great artery and the nerves of the arm are much preſſed; if this kind of diſlocation is not eaſily reduced by the method directed, when the head of the arm-bone is in the arm-pit, a pulley from the top of a room may be faſtened to the diſlocated arm, juſt above the elbow, and the patient gradually raiſed from the ground by it; this at leaſt brings the head of the arm-bone into the arm-pit, whence, as directed above, it may be reſtored to it's proper place; in this proceſs the fore-arm muſt be brought toward the breaſt, that the muſcles may be relaxed.

If the diſlocation is backward, the elbow approaches the breaſt, and the head of the bone is prominent on the outſide of the ſhoulder, the arm cannot be moved from the breaſt, nor extended without great agony, and the lower angle of the ſhoulder-blade will be ſomewhat puſhed out. In this caſe the general proceedings may be the ſame as when the head of the arm bone is under the pectoral muſcles.

When a pully cannot eaſily be had, a taller ſtrong man may take the patient's arm over his ſhoulder and gently raiſe him from the ground, and the operator may puſh the head of the diſlocated bone into it's place as the body becomes ſuſpended; and this method of ſuſpending the body is not attended with the pain that might be apprehended, for as no force is uſed about the ſhoulder to make a counter extenſion, the patient does not ſuffer from ſuch troubleſome excoriations and contuſions as too commonly attend other methods.

As to the uſe of machines for reducing a diſlocated arm-bone, ſurgeons of the firſt eminence are of opinion that they are never actually neceſſary, as the very beſt of them are apt to bruiſe the part, and require great care to keep them perpendicular to the ſides of the patients.

As in other diſlocations, bleeding and regimen, to prevent or check inflammation and ſwelling, may be proper after reduction, and the arm muſt be ſuſpended in a ſling.

A Diſlocation of the Elbow.

THIS bone is ſeldom perfectly diſlocated, except the pointed extremity of it is fractured, or the ligaments greatly weakened; this diſlocation may be backward, (which is the moſt frequent) forward, outward, or inward; if the diſlocation is backward, the arm appears crooked, ſhorter than the other, and cannot be extended; in the internal part of the bending, the upper-arm-bone will be prominent; in the external the obtuſe point of the bone of the fore arm, or that between the elbow and point, with a large cavity between both bones; when by reaſon of a fracture of the laſt-mentioned part of the arm-bone, the elbow is puſhed forward, the upper arm-bone will ſtick out behind, the ulna or lower bone of the fore-arm is prominent on the fore-part, and a cavity appears in proportion to the diſlocation; if the diſlocation is external, the ſwelling is ſo too, and the contrary.

When the diſlocation has been affected by great violence, or is of long ſtanding, the bone cannot be replaced without great difficulty, on account of the ſtrong ligament, and various proceſſes; recent and ſlighter diſlocations are reſtored with leſs difficulty.

If the ligaments and tendons are rigid emollient applications muſt be made ſome time before attempting the reduction; and for this purpoſe neats-foot oil may be uſed, or the following liquor, which is commonly called the egg liquor.

To make the egg liquor—

> Take the yolk of a new laid egg, beat it with a ſpoon till it is as thin as water, then by a ſingle ſpoonful at a time, add ſix table-ſpoonſuls of pure water, ſhake the mixture well that the egg and water may incorporate. The rigid or ſtiffened part is to be rubbed gently with it three or four times a day; it muſt be freſh made every twenty-four hours.

The diſlocation of the elbow is to be reduced, by making an extenſion, until the fore-arm can be put into a moveable ſtate; and then the work is eaſily accompliſhed, by bearing upon the lower end of the upper arm-bone with one hand, and by taking hold of the wriſt and bending the elbow with the other; and if it is on either ſide, the hand of the patient muſt be turned inward or outward, at the ſame inſtant, as the caſe requires. After reduction, the arm muſt be hung in a ſtring.

A Diſlocation of the Hand.

THE hand may be diſlocated backward, forward, and on each ſide; but backward and forward moſt frequently. The hand is ſaid to be diſlocated forward when it inclines to the muſcles of the fingers within the hands, and backwards; when it inclines towards thoſe without; outwards, when there is a protuberance near the thumb, and a cavity near the little finger; and inwards, when the contrary happens.

From the diſtortion of the ſtrong ligament there is exquiſite pain, and the fingers are fixed ſo that they can neither be bent nor extended, by reaſon of the compreſſion of their tendons; hence will follow inflammation, ſwelling, abſceſs, mortification, and a rottenneſs of the ſpungy bones of the wriſt, which are ſeldom curable without amputation. But in a recent inconſiderable diſlocation, a milder practice will compleat the cure; and even this kind of diſlocation ſhould be ſpeedily reduced, which muſt be done by extending the hand and arm in oppoſite directions, and placing the hollow of the extended hand on a board, or ſome other flat body, that the protuberance may be depreſſed; and this method muſt be purſued whatever part of the hand is diſlocated.

A Diſ-

A Diſlocation of the Thigh-Bone.

WHEN the neck of this bone is fractured, the injury is ſometimes miſtaken for a diſlocation. The head of the thigh-bone may be diſlocated downwards, forwards, inwards, outwards, and backwards. This diſlocation, like that of the upper arm-bone, is always perfect, and moſt frequently happens inward and downward, the head of the bone tending towards the groin.

If the diſlocation is outwards, the bone generally ſlips upward at the ſame time; if it is inwards and downwards, the leg becomes longer, and more bent than the other: the knee and foot turn outwards; and the head of the bone is thruſt near the lower part of the groin. Sometimes the compreſſion of a nerve which communicates with the bladder cauſes a ſuppreſſion of urine, and the preſſure on the crural nerve, or that which paſſes from the loins to the thigh, a numbneſs in the leg; a hollow is perceived in the buttock, becauſe of the change of poſition in the greater proceſs of the thigh-bone, and the reſt of the bone. If the reduction is long neglected, the limb withers: and if the patient ſhould not require a crutch, he will at leaſt halt; the knee of the diſlocated limb cannot be brought to the other; the greateſt pain is felt in the groin, and no grating can be perceived on moving the limb, as happens where the bone is fractured. If the diſlocation is backwards, the limb is drawn upwards, and then the cavity appears in the groin, and a ſwelling or protuberance in that part of the buttock where the head of the bone and greater proceſs are lodged; the limb is ſhortened, the foot bends inward, the heel will not touch the ground, but the patient ſeems to ſtand on his toes, and the diſlocated limb is more eaſily turned in than extended; in this caſe, ſome perſons ſtand and walk firmly without the bone being even reduced, provided they have a high heel to their ſhoe.

A fracture in the neck of the thigh-bone is diſtinguiſhed from a diſlocation of it's head, in that the thigh-bone may be diſlocated by a flux of humours, without any external violence, but only by walking or riſing up; that it may be unattended with pain, ſwelling, or inflammation; and that the whole limb may be bent and turned about in the receiving cavity without any crackling noiſe, which is uſually heard in fractures; the contrary ſigns of courſe indicate a fracture.

In reducing the diſlocated head of the thigh-bone an extenſion at length will not ſuffice, but it muſt be according to the direction of the neck of the bone; and eminent anatomiſts direct, when the thigh-bone is diſlocated inward or outward, to lay the patient on one ſide, ſo that the part into which the bone hath ſlipped be always uppermoſt, and that from which it hath been diſplaced lowermoſt; by which means the extenſion may be made in any direction which appears neceſſary, and the particular circumſtances will point out various ways of ſecuring the patient upon a bed, (for a table is uſually too high) ſo that a proper reſiſtance may be made to the extenſion. This done, the knee bent, and a towel fixed properly above it, the operator muſt place himſelf on that ſide of the thigh to which the bone is diſlocated, with his knee near the head of the bone, and both hands on the oppoſite ſide of the knee of the patient, an aſſiſtant being fixed at the ancle. The extenſion may be then gradually began by three or four men, with the thigh rather in a bending ſtate; and when there is reaſon to think that the head of the bone is brought to a level with the ſocket, the extenſion being ſteadily continued, the knee may be bent near to the belly; and, at the ſame time, whilſt the knee puſhes the bone towards it's place, the ancle muſt be moved in the ſame direction, but the knee of the patient in a contrary one. Thus the head will always go into the ſocket, provided a due extenſion is made before it is attempted to be returned.

Sometimes the head of the thigh-bone is puſhed between the two bones which are called the *iſchium* and *ſacrum*, below the extremity of the back-bone; in this caſe, except the patient is very thin, before attempting the reduction, it has been thought adviſeable to reduce his fleſh by repeated briſk purges, given at ſhort intervals; by which means the ſtate of the caſe may be better diſcovered, and the reduction effected with more certainty and eaſe.

A Diſlocation of the Knee-Pan.

THE diſlocation of this bone may happen externally and internally. In order to it's reduction, the patient's leg muſt be ſet ſtraight; or, if he can, he may ſtand erect: then the operator muſt take firm hold of the knee-pan with his fingers, and force it into it's place. After this nothing is required but a ſtrengthening plaiſter and a little reſt.

A Diſlocation of the ſmaller Bone of the Leg.

THE ſmall bone may be ſeparated from the greater either at the lower or higher part. When it happens at the lower part, it is in general occaſioned by a diſlocation of the foot externally; this bone muſt be reduced, and bound up, and the reſt of the treatment muſt be agreeable to the directions given for diſlocations of the knee-pan.

A Diſlocation of the Ancle.

IT has been obſerved by anatomiſts, that when the ancle is diſlocated internally, there is generally a fracture of the ſmaller bone of the leg; but if the perſon is of a looſe habit, the ligaments may be relaxed without ſuch a fracture.

When the diſlocation of the ancle is inward, the bottom of the foot turns outward; when it is diſlocated outwardly, the bottom of the foot turns inward; if forward, the heel becomes ſhorter, and the foot longer than uſual; if backward, the heel ſeems lengthened, and the foot ſhortened. This kind of diſlocation is uſually attended with intenſe pain, and frequently with other very violent ſymptoms; and the difficulty of reducing the ancle is proportioned to the violence of the cauſe. The patient being conveniently placed, two aſſiſtants muſt extend the leg and foot in oppoſite directions, whilſt the operator replaces the bones with his hands and fingers. This work finiſhed, the patient ſhould keep in bed until the ſymptoms leave him, and he is in ſome meaſure able to ſupport the weight of his body upon his ancle.

A Diſlocation of the Heel-Bone.

THIS bone may be diſlocated both inwardly and outwardly; it is diſcoverable by a cavity on one ſide, and a ſwelling or protuberance on the other; and occaſions ſevere pains. The reduction and cure muſt be the ſame as directed when the bones of the hand are diſlocated.

A Diſlocation of the Bones of the Foot.

WHEN theſe bones are diſlocated the pain is uſually very ſevere, and attended with inflammation, and ſometimes convulſions, if ſpeedy aſſiſtance is not obtained. They muſt be reduced as directed when the bones of the hand are the ſubject of this accident.

A Diſlocation

A Diſlocation of the Bones of the Noſe.

BOTH the eye and the touch ſufficiently point out this accident. The reduction is to be effected by a quill put up the noſtrils, and then with the fingers replacing the bone or bones as has been directed in caſe of a fracture in the ſame parts. After the reduction, a ſticking plaiſter ſhould be applied and continued ſome time.

A Diſlocation of the lower Jaw.

THE lower jaw-bone is uſually diſlocated forwards; ſometimes on one and ſometimes on both it's ſides. If one ſide only is diſlocated, the chin inclines to the oppoſite ſide; and on the diſlocated ſide the mouth is wider open than uſual. When both ſides are diſlocated, the mouth gapes wide, the jaw ſtarts forward, and the chin falls towards the breaſt; ſo that the patient can neither ſhut his mouth, ſpeak diſtinctly, nor ſwallow without extreme difficulty. This accident may be occaſioned by a blow or by yawning.

When one ſide only is diſlocated, it is eaſily reduced; but when both ſides are the ſubjects of this injury, reduction is neceſſary, or violent and ſometimes fatal ſymptoms ſoon follow.

To reduce the jaw-bone, place the patient in a low ſeat, with his head ſecured againſt the breaſt of an aſſiſtant, then the operator having wrapped his thumbs round with cloths, to prevent their being bit, muſt place them on the patient's teeth, as far back as he conveniently can, at the ſame time fixing his fingers on the outſide of the jaw; when ſecure hold is thus taken of the jaw, it muſt be preſſed downward, then backward and then upward. If all this is done as nearly as poſſible in the ſame inſtant, the reduction will be compleat.

If only one ſide is diſlocated, the ſame proceedings will be neceſſary, only that the injured ſide muſt be moſt forcibly preſſed downwards, and backwards.

In this caſe bandages can be of no uſe.

A Diſlocation of the Neck.

A Diſlocation between the head and the upper part of the neck is immediate death, becauſe of the preſſure on the ſpinal marrow. When a man is ſaid to have broken his neck, the expreſſion means a partial diſlocation of the firſt or ſecond vertebra or joining of the neck-bones only: in this caſe the chin is fixed to the breaſt, which prevents the patient from ſpeaking, ſwallowing, or moving the parts below. Whoever is by when ſuch an accident happens, ſhould immediately turn the patient on his back, and ſetting his feet againſt his ſhoulders, (being himſelf ſeated on the ground) he ſhould place his hands below the patient's ears, and pull, gradually increaſing the force with which he pulls, and moving the head from ſide to ſide at the ſame time.

When by theſe means the bones have been reduced to their natural poſition, the parts ſhould be bathed with camphorated ſpirit of wine, which may prevent abſceſſes and other ill conſequences.

A Diſlocation of the Ribs.

A Rib may be diſlocated upwards, downwards, and inwards. If a rib is forced inwards, the pleura or membrane which lines the breaſt will be injured, and excruciating pains, inflammations, difficulty of breathing, coughs, ulcers, immobility of the body, and other violent ſymptoms, will follow; from whence, as well as from the external poſition of the ſide, this misfortune may be diſcovered: the ſhortneſs of breathing is almoſt an infallible ſign. This diſlocation happens betwixt the rib and the ſpine of the back.

When the rib is diſlocated upwards or downwards, the patient muſt be laid on a table, or the arm on the affected ſide may be fixed over a door, or a round of a ladder, and then the rib may be replaced with the fingers.

Internal diſlocations are reduced with difficulty, becauſe neither the hands nor any inſtrument can be applied to elevate them; however, the patient may be laid on his belly over ſome body of a cylindrical form, and the inner part of the rib being moved gently towards the back, or a little ſhaken, the head may probably recover it's ſituation without farther aſſiſtance. If this fails, the ſame methods muſt be taken as have been directed for fractures of the ribs, when they are forced inwards; but if the ſymptoms are not violent, nor the heads of the ribs much removed, it will be prudent to abſtain from compulſive or violent means, as diſlocated ribs have often remained ſo without danger, or much inconvenience.

The bandage ſhould be a napkin and ſcapulary; and bolſters of folded linen may be applied after ſqueezing them out of camphorated ſpirit of wine.

The ſcapulary and napkin is a piece of cloth, four or five inches broad, in the middle of which a ſlit is made for the head to paſs through; the length muſt be proportioned to the ſtature of the patient; but it muſt reach below the diſplaced rib, and rollers are fixed to the corners of it, by which it is effectually ſecured.

A Diſlocation of the Vertebræ, or Separation of the Parts of the Back or Neck-Bones.

DISLOCATIONS of theſe bones are rarely perfect. Thoſe of the neck being ſmall and eaſily moveable, are more ſubject to this accident than thoſe of the back. Thoſe of the loins are alſo more eaſily diſlocated than thoſe of the back, becauſe they are more moveable and ſmooth, and deſtitute of thoſe cavities with which the vertebræ of the back are furniſhed, and have a thicker cartilage interpoſed between each. Diſlocations of the vertebræ muſt be imperfect, unleſs attended with a fracture and a laceration of the ſpinal marrow, which threatens inſtant death. But even theſe imperfect diſlocations are often ſpeedily fatal; and they moſt frequently happen in the upper vertebræ of the neck, for the reaſons already mentioned.

It has been obſerved, that children, between the ages of four and ten, are apt to have diſlocations of the vertebræ of the neck near the head, from internal cauſes; and inſtances of this kind ſometimes happen which are manifeſtly occaſioned by worms; becauſe, when thoſe animals have been either deſtroyed or voided, the patients necks have ſpontaneouſly and ſuddenly returned to their original ſtate, and every other ſymptom preſently vaniſhed.

The bones of the back are ſeldom moved much without a fracture; their upper or lower projections, and ſometimes only one of them being uſually miſplaced; and this partial diſlocation does not happen without great violence. When a vertebræ or diviſion of the back-bone is diſlocated without a fracture, the body leans to one ſide or forwards; if the left ſide is affected, the patient leans to the right, and ſo the contrary.

Diſlocations of the back-bone are diſcovered by the crookedneſs or inequality of the part; by the patient's incapability of ſtanding or walking, and by his whole body ſeeming paralytic; all the parts below the diſlocation are alſo inſenſible and immoveable; the excrements and the urine are either wholly witheld, or involuntarily emitted; the lower parts gradually mortify, and the death of the unhappy ſufferer ſoon ends the complaint.

Diſlocations of all kinds in the ſpine are attended with conſiderable danger, both on account of the injury which may be done to the ſpinal marrow, and the difficulty of reducing the bones. The danger is alſo augmented as the diſlocation approaches to the head, becauſe here the ſpinal marrow is ſooneſt hurt. When ſeveral vertebræ are diſlocated together, the ſymptoms are not in general ſo violent.

The manner of reducing the diſlocated vertebræ of the neck hath already been directed under that head; when both the projections of the vertebræ are diſlocated, the patient muſt be laid on his belly, over a tub, a caſk, or ſome other round body; two aſſiſtants muſt then depreſs both ends of the diſlocated ſpine, on each ſide, which will elevate and gradually extend the vertebræ; the ſpinal bone of the back being thus bent in form of an arch, the operator is to preſs down the lower diſlocated and prominent vertebræ, and at the ſame inſtant muſt expeditiouſly puſh the ſuperior part of the body upwards. If the firſt attempt fails, it muſt be repeated two or three times. When the left projection only is diſplaced, after the patient is laid in the ſame poſture as before deſcribed, one aſſiſtant may depreſs the left thigh-bone, and the other the right arm-bone at the ſhoulder, and the reverſe, if the injury is on the other ſide. After the reduction hath been effected, it will be proper to take away ſome blood, and to apply compreſſes wrung out of ſpirit of wine camphorated, and the napkin and ſcapulary, as above deſcribed.

CHAP. XI.

Of Strains.

A Strain is the ſtretch of a tendinous or membranous part beyond it's proper limits; and this accident moſt commonly happens about the joints, being attended with weakneſs, pain, ſwelling, and frequently a total incapacity of moving.

It is a received, but very miſtaken opinion, that ſtrains are more difficult of cure, and attended with worſe conſequences, than fractures or diſlocations; the latter are very frequently followed by abſceſſes and mortifications, and often leave the limb ſtiff or diſtorted; but ſtrains are in general relieved by reſt and ſimple applications, and few inſtances have been known of their having produced any other diſagreeable effects than confinement and temporary pain.

It is a common practice to immerſe the ſtrained limb in a veſſel of cold water; and provided it be done immediately, and not perſiſted in too long, or repeated, it may be of uſe in ſlight caſes; but if the ſtrain be deep, this cold bathing is wholly ineffectual; and where any degree of inflammation attends, it is actually injurious.

The beſt and moſt ready application in thoſe caſes is warm vinegar; with this the part affected ſhould be bathed three or four times a day; and as the tenſion and violence of the ſymptoms abate, the vinegar may be uſed cold, and a ſmall quantity of ſpirits added to it, the proportion of which latter may be increaſed as the pain and ſwelling go off; and when this happens, a bandage ſhould be applied as a ſupport till the return of the natural ſtrength in the part. Some adviſe the vinegar and ſpirit of wine to be uſed alternately, the vinegar being firſt rubbed in, and at the diſtance of two or three hours the ſpirit.

Various other external applications are preſcribed on theſe occaſions; among them, the common volatile liniment or opodeldoc, volatile aromatic ſpirit, diluted with two thirds water to one of the ſpirit, and cataplaſms of oatmeal, with vinegar or ſtale beer, may be uſed in ſome caſes with advantage; though we are inclined to believe that the method of treatment adviſed above is the moſt likely to produce ſpeedy and ſalutary effects.

Strains in the ſpine or back-bone frequently bring on abſceſſes and inflammation, which deſtroying the ſubſtance that connects the vertebræ, occaſion theſe bones to ſtart outward; and theſe accidents ſometimes terminate fatally, and are always troubleſome and tedious; in the former caſe, the patient is ſeized with a palſy in his lower limbs, which gradually increaſes till it reaches the vital parts; when this does not happen, he is attacked by a ſevere pain in his back, which admits of no remiſſion but whilſt he is in a ſtooping poſture, and in this caſe a tumor is generally formed; to abate which, and procure relief, the patient muſt be kept in bed, or ſupported in a chair, the back of which may be either heightened or lowered at pleaſure.

C H A P. XII.

Of the leſſer Inconveniences which do not ſo much affect the Healths of Mankind, as their Eaſe.

THESE diſagreeable and troubleſome, though not dangerous complaints, may be generally confined to *wens*, *warts*, *galls*, *corns*, and *nails* of ill growth, or which have been affected by accidents.

Wens are ſaid to be of three ſorts; the firſt, whoſe contents reſemble boiled rice, curds, or a poultice of bread; the ſecond, the contents of which are of the conſiſtence of honey; and a third, which actually contains a fat matter appearing to poſſeſs all the qualities of common greaſe.

No external remedies will produce any change in theſe excreſcences, which are moſt effectually got rid of by actual extirpation with the knife; and this attempt may be made with ſafety, or not, in the two former caſes, as they are ſituated with reſpect to adjacent veſſels, wounding which might endanger the patient's life. In the latter caſe, as the wen does not run between the muſcles, nor poſſeſſes any blood-veſſels of conſiderable ſize, it may always be cut off with eaſe and ſafety.

When the baſes of wens of either of the above ſpecies are narrow, and they expand and grow larger towards the ſurfaces, attempts are ſometimes made to take them off by ligatures of ſilk wound round the lower parts of them, and drawn tight from time to time, till the excreſcences either actually drop off, or are held by ſuch a ſmall neck or ſtem, that they may be cut through without danger of a hæmorrhage; but this proceſs is attended with difficulty, and may in ſome caſes occaſion inflammatory ſymptoms, and even mortification; ſo that we cannot adviſe this expedient, when aſſiſtance can be had to remove them by inciſion.

Warts are ſaid by ingenious writers to be ſometimes the effects of a particular diſpoſition or fault in the blood, which throws out and feeds a ſurprizing quantity of theſe troubleſome excreſcences; but this chiefly happens to children between four and ten years of age, and of thoſe to ſuch in particular as feed principally on milk and milk meats; which may account for a common obſervation, that the children of peaſants are more liable to warts than thoſe of any higher claſs.

When they are occaſioned by internal cauſes, it will be neceſſary to change the diet, and two or three pills of the following compoſition may be taken every other night—

Take of Spaniſh ſoap, ſix drams; of extract of dandelion, one dram and a half; of gum ammoniac, half a dram—make the whole into a maſs with ſyrup of maidenhair, or any other mild ſyrup, and divide it into pills of three grains each.

But warts are more commonly an accidental diſorder of the ſkin, and require to be removed by external means.

For this purpoſe, whenever they become troubleſome, ligatures may be made round the bottoms of them with ſilk or thread waxed, which will ſeldom fail to take them off in time; though, as they approach nearer to ſeparation, they are apt to occaſion pain and inconvenience, which may be avoided by cutting them off with ſharp ſciſſars, or a crooked knife, and immediately applying a ſticking plaiſter of diachylon with the gums, over the part, which in general facilitates a ſuppuration, and effectually deſtroys the little arteries which ſeem to be the roots of theſe excreſcences.

Warts may alſo be removed by corroding applications; ſuch as the milk of ſpurge, ſwallow-wort, fig-leaves, celandine, or the gall of the eel or pike; but theſe corroſives ſhould be made uſe of with great caution, and eſpecially by perſons who have thin and delicate ſkins, as they are apt to occaſion ſwelling and inflammation: and ſtill more care ſhould be taken in the application of the mineral acids, the lunar cauſtic, or an actual cautery or burning with a hot iron; all which are preſcribed as effectual means to eradicate theſe unpleaſant and unſightly protuberances. Perhaps a plaiſter of common ſalt diſſolved with vinegar, or of ſal ammoniac and gum galbanum well incorporated, may as effectually anſwer the intended purpoſe, without producing theſe inconveniences, which are likely to happen from more powerful applications.

And, indeed, when theſe excreſcences are ſeated on the knuckles, the uſe of the knife or cauſtic applications may endanger the tendons; ſo that unleſs the milder remedies will prevail, it is moſt adviſable to let them remain, eſpecially as they frequently diſappear ſpontaneouſly, or fall off in conſequence of accidental blows and bruiſes.

And this alſo ſhould be the caſe with thoſe livid or bluiſh warts which ſometimes ſhew themſelves on the eye-lids, lips, and other parts of the face; theſe being of a cancerous nature, are apt to degenerate into that diſeaſe, if they are diſturbed or irritated by any attempt to remove them.

Galls may be of two kinds; either ſuch as occaſion ſimple excoriations of the ſkin, or ſuch as produce bladders containing a thin and acrid matter.

The former, which are generally produced by friction in riding, or by chafing of fat or fleſhy perſons in walking, may be relieved by a plaiſter of Turner's cerate, or a little fullers earth diſſolved in warm water; and thoſe whoſe ſkins are ſubject to excoriations in walking, may in general prevent this inconvenience by waſhing the parts every morning with cold water, and repeating it juſt before they are about to uſe any conſiderable exerciſe.

When the ſkin hardens, and, from a ſmarting or ſhooting pain, it is certain that matter has formed beneath it, the part ſhould be bathed in warm water, and being then opened, and the contents diſcharged, a dreſſing of cerate will in general compleat the cure; but as it heals, the dead ſkin ſhould be cut away.

Corns are a ſpecies of galls occaſioned entirely by imprudent conduct in confining the feet in narrow or ſhort ſhoes, or by miſfortune in being obliged to wear ſuch as are hard, ſtiff, and pieced.

For the cure of this complaint, there are almoſt as many preſcriptions as patients; the beſt, however, ſeems to be, to ſoften the part by repeated immerſions in warm water and bran, and then carefully cutting them with a knife that has a ſhort and ſtrong blade, avoiding with extreme caution to wound the ſound parts, which will be more likely to be touched in proportion as the corn extends over the ſurface. After the cutting, the part may be dreſſed with a diachylon plaiſter, or one ſpread with gum ammoniac ſoftened in vinegar. Inſtead of theſe plaiſters, leaves of houſe-leek or ground-ivy may be applied to the part after cutting; but it is by no means ſafe to attempt extirpating the roots by cauſtics or corroſives; for if the tendon ſhould be affected by theſe violent applications, inflammation and mortification may be the conſequences.

When by any accident the hands, feet, or legs are pierced by *ſplinters*, *thorns*, or any other *ſharp-pointed inſtruments*, it is of importance that they ſhould be immediately and compleatly extracted; in which caſe, theſe punctures are ſeldom attended with any ſerious conſequences, which may alſo be in a great meaſure prevented by bathing the part after extraction in warm water, or fomenting it with cloths dipped in the ſame liquid.

But if the offending ſubſtance is buried ſo deep that it cannot be eaſily got at, or if it is neglected to be ſought after, or partially extracted, it may frequently occaſion an inflammation, which in the extremities terminates in a tumor, attended with the ſame ſymptoms as mark a whitlow; or if it happens in the leg, may produce an abſceſs, with a train of diſagreeable and alarming circumſtances.

To avoid ſuch effects, if the ſubſtance which has penetrated remains ſtill ſo near the ſurface as to be perceptible to the eye or touch, a ſmall inciſion in the ſkin may be made, through which it may eaſily be extracted.

But this would be uſeleſs, and probably dangerous, if any inflammation has commenced, or the ſubſtance lies deep and out of ſight; in either of theſe caſes, the part ſhould be either bathed in warm water, or held a conſiderable time in the ſteam of a veſſel filled with it; after which emollient poultices of bread, milk, and oil, ſhould be applied, to relax the ſkin, and render it ſo ſupple that the elaſtic motion of the muſcles may be enabled to thruſt the offenſive body through it; and this ſhould be favoured by a poſture as much as poſſible directing the penetrating ſubſtance outward, and keeping the part affected as free from motion as the ſituation of it will admit.

If the ſubſtance which has done the injury cannot be extracted, but an abſceſs takes place, it ſhould be opened as ſoon as it can be known with certainty that matter is formed; by this means the foreign body may be ſpeedily removed, and diſagreeable effects prevented.

Nothing can be more abſurd, than the idea that external applications of particular natures will attract the obtruded ſubſtance by ſome ſympathetic or magnetic virtue, no ſuch principle can exiſt in the ſkin of a ſnake, or other matters uſually directed for this purpoſe: if bound cloſely on the part, they are much more likely to drive the occaſion of the complaint deeper, than to facilitate the diſcharge of it.

It ſometimes happens that the ſplinter or thorn having penetrated with great pain through the exterior integuments enters immediately into the fat, and the pain ceaſing, the patient is apt to conclude that no foreign matter had ever been admitted into the ſkin, or that it had eſcaped again by the ſame way in which it entered; yet, at the end of ſome days, or perhaps weeks, an uneaſineſs is felt in the part, which is ſucceeded by acute pains, and theſe by an inflammation and abſceſs, which muſt be treated as before directed for the more recent but ſimilar conſequences of theſe punctures, though it proves in general much more troubleſome, tedious, and difficult of cure.

The *nails* on the feet are ſometimes ſo troubleſome as to become the objects of attention, and in ſome inſtances to occaſion pain and actual danger to theſe extremities; but theſe inconveniences are in general occaſioned rather by accident or neglect than by any defect in the forms of theſe guards of the ultimate parts of the human body.

The complaints of the nails are brought on by preciſely the ſame cauſes as produce the other impediments to the comforts of walking; namely, ſtrait, ſtiff, and uneaſy ſhoes: but to theſe may be added neglect in paring theſe excreſcences, which being ſuffered to grow long, are then turned back by the ſhoe and driven into the toes, where they bring on pain, inflammation, and aſtoniſhing tenderneſs.

When this happens, the foot ſhould be bathed in warm water till the nails are perfectly ſoft, and then the corners which penetrate the fleſh muſt be cut off with a knife, and the middle part of the nail, (unleſs that has alſo been turned back and has entered the fleſh) with a pair of ſciſſars; but if the whole nail has been inverted, all parts of it that require removal muſt be taken off with the knife, in uſing which great care ſhould be taken not to draw blood, and eſpecially if the part is in an inflamed ſtate. Mortifications have frequently followed want of proper attention in this particular.

When the offending part of the nail has been diſplaced, the part may be wrapped in a plaiſter of cerate for a day or two; and if the inflammation ſhould continue, it may be bathed with flannels wrung out of an emollient fomentation, and ſprinkled with camphorated ſpirits of wine.

The practice of ſcraping or filing the nails, to render them thin and pliable, is extremely injurious; for as the nails are compoſed of ſeveral ſheets of longitudinal fibres, glued together, which being of different lengths, but the ſame thickneſs, are ſo laid over each other as to end at the extremity of the nail, this operation muſt wound unequally theſe fibres, and by degrees obſtruct their regular renewal, and conſequently hurt the growth of the nail and leſſen it's tranſparency.

BOOK XII.

General Cautions which reſpect Health.

CHAP. I.

A Short Retroſpect of the preceding Work, and a State of what remains to be treated of.

THOUGH we have already enumerated almoſt all the diſeaſes to which the human body is liable, in climates with which we are intimately acquainted, and have ſpecified moſt of the accidents to which that complicated machine is ſubject, endeavouring as we have proceeded to point out the ſeveral preventive as well as reſtorative remedies which preſent themſelves, and their applications in the various caſes, as well as in different climates, ages, habits, and conſtitutions, ſo that we truſt no difficulty will remain either in diſcovering the nature of indiſpoſitions from the ſymptoms, which we have marked with as much accuracy as the different ways in which diſorders affect different patients will admit; yet ſomething remains to be ſaid on the ſubject of thoſe common evacuations to which almoſt all ranks, and eſpecially the lower, ſubmit on every occaſion of illneſs, without the ſmalleſt knowledge of the propriety of ſuch meaſures, and without the leaſt conſideration on the fatal conſequences which may attend the improper and injudicious uſe of them.

Bleeding, purging, and vomitting, are the grand medical reſources of the ignorant valetudinarian; and theſe evacuations are practiſed by way of prevention or cure not only much more frequently than they are neceſſary, but too often when the life or future health of the patient may be moſt materially injured by them.

It is not an eaſy matter to convince thoſe who are fond of medicine or medical operations, that the ſame methods taken by a perſon in perfect health, and by one labouring under any diſeaſe or feeling the ſymptoms of it's approach, are very different matters; that in the former caſe, if they do not directly occaſion ſickneſs, they at beſt leave the body in a ſtate of propenſity to receive the impreſſions of diſeaſe, though in the latter, ſeaſonably applied, they may in many inſtances prevent the attacks of it; many people have contracted a habit and diſpoſition to take phyſic, and have injured their healths and impaired their conſtitutions, however naturally good, by an abuſe of thoſe means which Providence has afforded for the recovery and reeſtabliſhment of them.

Another ſtrong reaſon may be offered againſt perpetual dabbling in phyſic: When medicines are accuſtomed to be taken in health, the conſtitution becomes uſed to them, and they loſe their efficacy when ſickneſs makes them abſolutely needful, and the patient is deprived of the aſſiſtance they would have given him, if taken only in thoſe times and under thoſe circumſtances, in which they were actually neceſſary.

We ſhall therefore, in the following chapters, endeavour to point out ſuch rules as may determine when theſe ſeveral evacuations may be attended with advantage, and in what circumſtances they are more likely to prove injurious; and we ſhall adapt our directions on theſe ſubjects to the plaineſt underſtandings, that thoſe who are moſt likely to err in theſe particulars may receive the full benefit of them.

But there is ſtill another matter of great importance to the ſick, and which yet remains to be mentioned, and this is to eſtabliſh a proper underſtanding between the patient and his phyſician, when he can procure the aſſiſtance of one. We are well aware that many unfortunate events have been occaſioned by the inability of the ſick man to deſcribe his complaints accurately to him who is to preſcribe for them, nor do the proper queſtions always occur to the medical practitioner; for the ſake of both, therefore, we ſhall adapt the method of an ingenious and benevolent phyſician of another country, and ſtate as nearly as may be, the queſtions neceſſary to be aſked by the phyſician, ſo as to obtain from his patient ſuch an idea of his caſe, as may enable him to preſcribe for it with ſafety and ſucceſs.

CHAP. II.

Of the Caſes in which Bleeding may be uſeful and prejudicial.

THERE are only four conditions or ſtates of the body, in which bleeding is neceſſary. The firſt, when there is too great a quantity of blood in the body; the ſecond, when there is an inflammation or inflammatory diſeaſe; the third, when the conſtitution is threatened with inflammation or other dangerous ſymptoms, if the veſſels are not relaxed by bleeding, (and upon this principle, perſons are bled who have received wounds or bruiſes, pregnant women who are afflicted with coughs; and this operation is performed by way of precaution in other caſes:) and the fourth, to aſſuage exceſſive pain, though not owing to exceſs of blood or inflammation, but merely to procure preſent relief, and afford time for applying other remedies to the cauſe; but both the two latter reaſons are in fact involved in the two former; ſo that an exceſs of blood, and an inflamed ſtate of it, are in truth the only abſolutely neceſſary motives for bleeding.

Of inflammatory diſeaſes, and all the ſymptoms pointing them out and attending them, we have already ſpoken largely; the exceſs of blood may be diſcovered by the following ſigns and circumſtances.

The firſt leading circumſtance to be remarked, is the patient's manner of living when in health; if he eats freely of fleſh, and other juicy and nutricious food; if he drinks rich wine, ale, and other ſtrong or nouriſhing liquors; if he digeſts his food well, uſes little exerciſe, indulges in much ſleep, and is ſubject to no very extraordinary evacuation, it may be very fairly inferred that he abounds in blood.

But exceſs of blood from theſe cauſes is ſeldom found among the lower claſs of people, and particularly peaſants, who are moſt addicted to bleeding; the food they eat generates but a ſmall quantity of blood, and the conſtant exerciſe to which they are enured, conſpires to render it leſs; ſo that one of the principal cauſes of this evacuation, ſeldom exiſts among the low and laborious ranks of life.

The many other cauſes which we are about to enumerate, are not ſo ſtrictly confined to any particular claſs; though even ſome of theſe are much leſs frequently met with among the inferior than among the higher orders of men. Theſe are, a decreaſe, ſtoppage, or interruption of ſome accuſtomed involuntary hæmorrhage, or diſcharge of blood; a full and ſtrong pulſe, and veins viſibly filled with blood, in a body neither lean, thin, or overheated; a florid and lively colour in the face; great and unuſual numbneſs in the limbs; more profound ſleep, and of longer continuance than uſual, yet ſomewhat diſturbed by dreams and reſtleſſneſs; a greater fatigue than ordinary after uſual exerciſe or labour, and even a perceptible weight and oppreſſion after a common walk; palpitations, accompanied ſometimes with very great dejection, and at others with fainting fits, and eſpecially on being in any hot place, or any conſiderable motion; giddineſs, or ſwimmings of the head, eſpecially after ſtooping, and immediately on being waked from ſleep; pains in the head, to which the patient has not been uſually ſubject, and which do not ſeem to ariſe from indigeſtion; unuſual heat over the whole body; an itching in the ſkin, and particularly after exerciſe, at approaching a fire, or any other additional warmth communicated to the body, and hæmorrhages from the noſe or otherwiſe; always, however, giving preſent relief, and raiſing the ſpirits.

Yet one of theſe ſymptoms is ſeldom ſufficient to prove ſuch an exceſs of blood as to conſtitute ill health; ſeveral of them muſt be found to concur, and the cauſes of that concurrence be undoubted, before ſuch a concluſion ſhould be formed.

When, however, from all circumſtances, it is apparent that ſuch an exceſs exiſts, a ſingle, or even a repeated bleeding, may be attended with beneficial conſequences; nor is it in general at all material from what part of the body the blood is drawn.

But when none of the above-mentioned circumſtances are apparent, bleeding is by no means neceſſary; nor ſhould this operation ever take place but in very particular caſes, and under the opinion of an experienced phyſician; when the ſituation and condition of the body anſwers any part of the following deſcription.

When the patient is an infant, or very far advanced in life; when his conſtitution is naturally weak and feeble, or he is reduced by ſickneſs, or other bodily infirmities; when the pulſe is low, ſmall, weak, or intermittent, and the countenance pale or cadaverous; when the appetite is decayed, the fleſh waſtes for want of nouriſhment, and the patient is ſubject to nocturnal ſweats, or profuſe perſpiration after any conſiderable exerciſe; when the ſtate of the ſtomach is diſordered, and digeſtion is ſo ill performed that a proper quantity of blood cannot be generated; when the body has been debilitated by a dyſentery of any kind, hæmorrhage, ſweat, or profuſe diſcharge of urine, either as original diſeaſes, or as the criſis of ſome other; when ſome chronic diſorder of long ſtanding, ariſing from obſtruction, hath rendered it probable that but little blood can have been formed; when the conſtitution ſeems exhauſted, and the habit bad; and when the blood is in a broken or diſſolved ſtate, thin, pale, and inclined to putridity.

In all theſe caſes, and perhaps in ſome others, a ſingle bleeding will generally prove hurtful; and a repetition of the operation may prove immediately fatal, or bring on a train of dangerous and incurable ſymptoms.

For whatever may be the patient's ſituation, or however high his health, or robuſt his conſtitution, certain it is, that the bleeding which is unneceſſary is injurious; and that a repetition of this operation tends to leſſen the powers of circulation, ſubſtitute fat for fleſh, bring on a general weakneſs, and incapability of enduring fatigue, haſten the approach of all the imbecilities of old age, and the digeſtion ſuffering, of courſe a dropſy is too often one of the effects.

Nor are theſe the only fatal conſequences which follow the wanton and injudicious practice of bleeding; as the perſpiration muſt neceſſarily be injured by it, the patient becomes proportionably more ſubject to all the inconveniences of colds, and conſequent diſorders; the nervous ſyſtem partakes of the general weakneſs; and lowneſs of ſpirits, tremblings, and all the hypochondriac ſymptoms, fill up the meaſure of evils.

The arguments which are ſometimes uſed in favour of bleeding are ſelf-deſtructive: if it ſhould be aſſerted, that the loſs of blood is ſpeedily repaired, and that thoſe who ſuffer it have been found to weigh more in a few days after the operation than they did before, inferring from thence that this loſs is eaſily and ſpeedily repaired; it may be anſwered, that the increaſe of weight, inſtead of affording an argument in ſupport of bleeding, operates ſtrongly againſt it; amounting to an undoubted proof, that the body is reduced to ſuch a ſtate as to be incapable of rendering the natural excretions or evacuations compleat; that therefore ſome noxious humours which required expulſion, remain, and render the maſs of blood, though ſomewhat increaſed in quantity, leſs pure, and leſs proper to ſupport the body in health, than before it has received this addition; nay, if it ſhould be admitted that the augmentation of the blood was made in a fluid equal in purity and goodneſs to that which had been taken away, it may fairly be argued that repeated bleedings would tend to produce ſuch an exceſs of blood, as muſt infallibly bring on inflammatory diſorders.

But bleeding may in many, if not moſt inſtances, be rendered unneceſſary, by avoiding the cauſes which tend to augment the quantity of blood; and this may be done by altering the nature, and leſſening the quantity, of nutritious food and liquors; taking a larger proportion of vegetable than of animal food, increaſing the accuſtomed exerciſe, and abridging the uſual hours of ſleep; by theſe means, the quantity of the blood will be gradually and inſenſibly decreaſed, and that too in ſuch a way as not to commit any violence on the conſtitution; the remaining blood will be more pure, and even leſs charged with noxious humours, than before. And on any occaſion in which bleeding may be actually requiſite, the beſt effects might be expected from it; and ſuch a courſe we recommend to thoſe who have habituated themſelves to bleed at certain periodical ſeaſons, as the only method of getting rid of a cuſtom which cannot be purſued without certain and imminent danger to their conſtitutions and lives.

Before we conclude this chapter, it may be right to mention a vulgar error, which, however, is too prevalent, that the firſt bleeding infallibly preſerves the patient's life, however deſperate the diſeaſe, or extreme the danger; but this is a moſt pernicious doctrine, and cannot be too ſtrongly oppoſed, becauſe on this dependance the diſorder which an early bleeding might have ſuppreſſed, will be ſuffered to riſe to ſuch a height, that at the critical moment when it may be thought proper to exert this charm in favour of the deluded patient, the fatal invader of his health may, and moſt probably will, have got too ſure poſſeſſion of his poſts to be expelled by this attack, and the unfortunate patient fall a ſacrifice to folly, ignorance, and abſurdity.

CHAP. III.

Of Purging and Vomiting.

OF theſe two methods of emptying the ſtomach and bowels, when they are either of them overloaded, the former is unqueſtionably much more natural, and therefore is in moſt caſes to be preferred; yet there are undoubtedly ſome in which artificial vomiting is required, though it occaſions violent motions, and ſuch as are contradictory to the courſe of nature.

The following are the ſigns which point out a neceſſity for *purging*. A ſalt, bitter, or other diſagreeable taſte in the mouth, eſpecially in the morning; a foul tongue, lips, and teeth; ſour and fœtid eructations or belchings; wind and ſwelling in the ſtomach; loſs of appetite, increaſing by degrees, yet unaccompanied by any fever, and terminating in a total diſlike at firſt of ſome kinds of food, and at length of all, and a ſameneſs of taſte in all the aliment which is attempted to be got down; frequent retchings to vomit, and particularly in the mornings faſting, not being occaſioned by pregnancy, or other particular diſorder which requires different treatment; a diſcharge by ſpontaneous vomit of bitter ſtinking matter; a ſenſe of weight in the ſtomach and bowels, and a wearineſs in the loins and knees; loſs of ſtrength, with reſtleſſneſs, peeviſhneſs, and depreſſion of ſpirits; pains in the ſtomach and head; giddineſs, and a diſpoſition to ſleep immoderately, and at unuſual times, particularly after eating; inequality of ſtools, ſometimes too frequent and liquid, and at others too ſeldom and hard; and an irregular, weakened and intermitting pulſe.

For moſt of theſe complaints, when the patient does not labour under any particular diſeaſe of which they may be accounted ſymptoms, gentle purges, adapted to the nature of the indiſpoſition, as preſcribed in various parts of this work, may be adminiſtered with propriety; the quantities, and neceſſity of repeating which, muſt alſo be governed by age, conſtitution, and the particular circumſtances and exigencies of the caſe.

But as ill taſtes in the mouth, belchings, frequent retchings to vomit, and actual diſcharges in that way, are proofs that the cauſe of the indiſpoſition is a diſordered ſtate of the ſtomach, *vomits* will be of ſervice, ſeveral kinds of which have been already preſcribed in different diſorders, though we ſhould recommend thoſe of ipecacuanha in the caſes juſt mentioned.

But both theſe evacuations are to be avoided, when the patient's indiſpoſition originates principally in a general weakneſs, or an exhauſted habit; when it is attended with fever in any degree of violence, with a conſiderable augmentation of the natural heat of the body, with any particular dryneſs or criſpneſs of the ſkin, and particularly in the extremities; when the exertions of nature favour ſome other evacuation, ſuch as ſweats, the periodical diſcharges of females, or the like; during the violent paroxiſms of gout, or other diſorders which depend on perſpiration for relief; in ſcrophulous caſes, and ſuch other inveterate obſtructions as purges have been found incapable of removing; and in many of the complaints which ariſe from a diſordered or weakened nervous ſyſtem.

There are alſo ſome other caſes beſides thoſe already mentioned, in which it may be proper to give a purge, yet vomiting would be attended with the utmoſt danger; and thoſe are, when the exceſs of blood has increaſed the force of the circulation, and the blood-veſſels of the upper parts of the body being unuſually diſtended, might burſt from the violent efforts uſed in vomiting, and the patient expire on the ſpot; inſtances of which have not unfrequently happened. The ſame reaſons will alſo operate againſt vomiting thoſe who are ſubject to bleedings from the noſe, or other hæmorrhages; women with child, or perſons troubled with ruptures: yet in all theſe caſes it may be neceſſary to purge.

Acrid, ſharp purges, and violent vomits, are apt to produce the ſame effects as certain poiſons, the patient experiencing the ſame kinds of pains and agitations, and in certain caſes ſwoonings, and even convulſions; and ſometimes violent purges cauſe ſuch continued and immoderate evacuations, as to bring the patient's life into extreme danger.

In the former caſe, the patient muſt be treated as if he was actually poiſoned; he muſt be filled with oleous and emollient liquids; clyſters of the ſame compoſition, with the addition of yolks of eggs, ſhould be frequently thrown up; and if the pains are acute, the pulſe high, and the heat and fever troubleſome, it may be alſo neceſſary to bleed moderately, according as the ſtrength of the patient and other circumſtances may direct.

When the diſcharges continue ſo long and ſo exceſſive as to threaten danger, the patient ſhould drink freely of diluting liquors; after which the evacuation may be ſtopped by ſuch anodyne medicines as have been preſcribed for the relief of acute pains.

The frequent repetitions of unneceſſary purges have in general nearly the ſame effect as bleeding without ſufficient cauſe; or too often, the digeſtion is injured by them; the functions of the ſtomach are performed with languor and irregularity; the action of the inteſtines is ſuſpended; colic pains become frequent and ſevere; the perſpiration is obſtructed; defluxions and nervous diſeaſes follow, with univerſal debility, a falling off of the fleſh, a deprivation of ſpirits, and all the marks of univerſal decay.

And whilſt we are treating of this ſubject, we muſt not neglect to mention the pernicious and often fatal effects of frequent purges adminiſtered to children: a practice too common in all ranks of life; which, inſtead of removing or preventing diſorders in ſuch young ſubjects, ſerve only to weaken their conſtitutions, ſtop their growth, and prevent the attainment of that ſtrength which they would otherwiſe have derived from nature; added to which, they are fatal enemies to the teeth, render thoſe of the female ſex liable to future obſtructions, and at that time of life when the periodical diſcharges commence, interrupt them, and occaſion irregularity, and other ill conſequences.

Another fatal error, too frequently committed, is, the cuſtom of infuſing purging medicines in brandy and other ſpirits, by way of warming and correcting the ſtomach, to the complaints in which theſe draughts may poſſibly afford ſome temporary relief, but in the event weaken the tones and deſtroy the functions of that organ, operating ultimately like other drams, in depriving thoſe who accuſtom themſelves to this kind of phyſic, of digeſtion and appetite, ſinking them into a ſtate of languor and depreſſion of ſpirits, and bringing on a dropſy to conclude the miſchief.

Moſt people, and thoſe who are young in particular, may in many caſes avoid the neceſſity of purging, in the ſame manner as they may render the operation of bleeding uſeleſs, by leſſening their uſual quantities of nutritious food and ſtrong liquor; if neceſſary, omitting one meal in a day; and taking conſtant additional exerciſe: in the ſame way may thoſe who are in the habit of taking purges or vomits periodically break through the abominable cuſtom.

Some general rules may alſo be obſerved in the uſe of both the evacuations of which we now ſpeak.

Preparatory to a purge or vomit, it may not be improper to prepare the patient, by directing him to abſtain from any conſiderable quantity of food, and particularly of the animal kind, for twenty four hours previous to the intended operation; and to drink in the mean time frequent draughts of herb teas, or other diluting liquors.

Purges may in many caſes be as well worked off with decoctions of emollient herbs, ſweetened with honey or ſugar, as with broths or gruel; and after taking an emetic medicine, no liquid ſhould be given till it excites ſickneſs or retching, and then it ſhould be worked off with moderate draughts only, of camomile-flower, or green tea, the cuſtom of waſhing out the ſtomach with large quantities of warm liquors, having been found by experience to be pernicious, and rather to prevent than promote the diſcharge of any offending matter from the ſtomach.

Nor is the preparation for theſe evacuations, or the management of the patient, during the operation of them, the only caution requiſite to prevent ill conſequences from the uſe of them, and to render them beneficial; as the ſtomach is more or leſs affected by every vomit or purge, the patient muſt extend his care to the ſucceeding three or four days, and not only avoid every ſpecies of exceſs, but obſerve a ſtrict, temperate, and ſomewhat abſtemious regimen, both with reſpect to his food and liquors: and, indeed, it will be in vain to expect the moſt properly adminiſtered medicines to be productive of the effects for which they are intended, unleſs a due regard to theſe eſſential points cooperate with them to render the work compleat.

CHAP. IV.

Of the Information neceſſary to be given by the Patient, and received by the Phyſician, in order to his preſcribing with Safety and Succeſs.

THE extreme difficulties of procuring proper intelligence from patients of the lower orders, on account of their ignorance and want of expreſſion, and a certain ſhyneſs or delicacy, which frequently reſtrains thoſe of a ſuperior claſs from being explicit and minute in the deſcriptions of their indiſpoſitions, are frequently inſuperable obſtacles in the road of the phyſician to preſcription and cure; and the perplexity and uneaſineſs which ſuch difficulties occaſion in the mind of a benevolent man, anxious for the ſafety of his patient, as well as the credit of his own reputation, may ſometimes put him off his guard, and prevent ſuch queſtions from occurring to him as may lead to the diſcovery he is ſo ſolicitous to make.

For the ſake of the phyſician, therefore, as well as the patient, we ſhall offer a ſet of general enquiries, which though they cannot poſſibly be pointed to all the caſes which may occur, will yet in a great meaſure anſwer the intended purpoſes, by drawing from the ſick ſuch accounts as will not fail to aſcertain the nature of their indiſpoſitions.

We ſhall divide theſe enquiries into three heads; thoſe which are to be made of men, of women, and of children; the complaints of the two latter differing in ſome particular circumſtances from thoſe of the former, as they are both liable to certain indiſpoſitions from which the former are exempt.

Queſtions to ſick Men.

OF what age are you?

Are you in general healthy; or are you ſubject to any particular diſorders; and what are they?

What is your accuſtomed manner of living in health, with reſpect to temperance and regimen?

How long ſince did this complaint attack you?

Are you feveriſh?

Let me feel your pulſe; is it hard or ſoft, quick or ſlow, regular or intermitting?

Do you retain your ſtrength, or has your preſent illneſs weakened you?

Do you keep your bed conſtantly, or ſit up in the day, and how long at a time?

Are your complaints the ſame throughout the day and night, or do they remit at intervals; how often, and for what continuance at a time?

Are you quiet or reſtleſs?

Do you complain of cold and ſhiverings, or of unuſual and unnatural heat?

Have you pains in your head, eyes, throat, breaſt, ſtomach, belly, loins, limbs, exremities, or in any internal part, and where in particular?

Are you troubled with thirſt? is your tongue foul or parched? have you a diſagreeable taſte in your mouth, ſickneſs at your ſtomach, inclination to vomit, or loathing of food?

Is your body in a lax or coſtive ſtate? how often have you ſtools, and what is their quantity, colour, and conſiſtence?

Is your urine leſſened or increaſed in quantity ſince your indiſpoſition? is it pale, or of a deep colour? is it clear, or cloudy? and does it drop any ſediment, and of what appearance?

Do you breathe freely?

Are you troubled with any cough; and is it a dry cough; or do you expectorate?

Do you reſt well; or is your ſleep broken, diſturbed, or interrupted?

Do you perſpire much by night, or after uſing common exerciſe by day?

What medicines have you taken ſince you have been ſick; and what effects have they produced?

What operations, or evacuations, have you undergone; and what has been the conſequence of them?

Is this the firſt time you have been attacked with this diſeaſe, or have you had it before, and how often?

To Women.

HAVE your periodical diſcharges commenced, and are they regular or irregular, moderate or immoderate?

Are you pregnant, and how far are you advanced?

Have you been delivered of a child, and was your delivery attended with any particular circumſtances?

Did your milk come in proper time, and in due quantities?

Do you ſuckle your child, or has your milk been repelled, and by what means?

Are you ſubject to thoſe diſcharges which are commonly called the whites?

Queſtions concerning Children.

HOW old is the child?

Has it cut any teeth; and what number?

Was the teething attended with great pain, or with convulſions, or other particular diſorders?

Is it troubled with rickets, knots, or knobs in the glands, or any other complaint; and of what nature?

Has it had the ſmall-pox, the meaſles, the chicken-pox, and the other eruptive diſeaſes to which children are liable; or any, and which of theſe diſorders?

Does it diſcharge worms, either by ſtool or vomit?

Is it's belly hard, ſwelled, and uncommonly large?

Does it reſt quietly, or is it's ſleep diſturbed?

Though, as we have already obſerved, it is impoſſible to frame any general ſet of queſtions to anſwer every particular purpoſe, yet the liſt we have given will naturally ſuggeſt ſuch others as may be neceſſary in almoſt every caſe to which they do not particularly apply: and with reſpect to women and children, we have noticed enough of thoſe complaints to which they are peculiarly liable, to lead to moſt others. It is unneceſſary to remark, that all the queſtions directed to the men are alſo applicable to females and infants.

And before we conclude this chapter it may not be improper to mention a common yet dangerous error, into which ſick perſons in the lower ranks of life are too apt to fall, from prejudices formed on opinions collected in converſations with each other.

When any of theſe claſſes call in medical aſſiſtance, they apprehend the ſkill of the phyſician is competent to a diſcovery of all their complaints, by an examination of the pulſe and inſpection of the tongue and water; and therefore obſtinately refuſe to give him any other information, alledging, as an excuſe, that their accounts may miſlead a judgment which can be much better grounded on the doctor's experience than on any intelligence he can receive from the ſick.

To obviate this pernicious idea, it is only neceſſary to remark, that the pulſe, tongue, and urine, will be affected in exactly the ſame way, in a great variety of different diſorders, but that the feelings of the patient will find out with certainty the nature of that with which he is afflicted; ſo that it depends on the ſick man himſelf, to point out his diſeaſe, and on the phyſician to preſcribe for it, according to the exigency of the caſe, which will be determined by the pulſe and other appearances abovementioned.

BOOK XIII.

Of certain Articles in common Uſe, which can neither be conſidered as Food or Medicine.

CHAP. I.

Of Indulgence in theſe Articles.

IT is ſomewhat extraordinary that habits ſhould prevail and become general, which, however uſe may reconcile men to them, muſt at firſt be ſo extremely diſagreeable, as to require no ſmall degree of determined reſolution to get the better of actual averſion, and that in the conqueſt of this averſion, they ſhould encounter pain, nauſea, and actual indiſpoſition, though the object they purſue, and in the attainment of which they ſubmit to ſuch unpleaſant ſenſations, is not in the event productive of the ſmalleſt advantage, either in the improvement of health, or in real additional comfort.

Yet, whoever will offer *tea*, *tobacco*, or *ſnuff*, to one who has never taſted the two former, and who is wholly unacquainted with the ſmell of the latter, will readily perceive that the former creates diſlike, and the two latter diſguſt, and that he will experience all the inconveniences we have deſcribed, before his palate and ſmell will be reconciled to theſe at preſent univerſal regales.

Nor will it be contended that the general and conſtant uſe of either of thoſe exotics, is attended with the ſmalleſt advantage; for though tea may have ſome good qualities, taken in moderation and in a proper manner, yet theſe are deſtroyed by the conſtant and immoderate uſe of it; and tobacco and ſnuff are in general ſo far from being uſeful, that they are more apt to create than cure diſorders; not but there may be caſes in which they may be applied to advantage medicinally, though they are rendered inefficacious even in this way, by the unvaried practice of taking them; not as contributory to health, but in compliance with cuſtom; for it can hardly be conceived that the gratification of pleaſure can be really conſulted in ſmoaking or chewing tobacco, or ſnuffing the powder of it up the noſtrils.

And as neither of theſe articles are contributory to health, in the manner which cuſtom has preſcribed for uſing them, ſo it is more than probable that they are actually prejudicial, it being an opinion which appears to be founded in reaſon, that whatever is conveyed into the human body in conſiderable quantities muſt either be productive of advantage or injury to the conſtitution.

But beſides theſe, there is ſtill another exotic of a much more dangerous nature, which though not in general, is yet in too common uſe; this is *opium*, an admirable drug, preſcribed in proper quantities, on occaſions which require it; but which, as an article of luxury or indulgence, brings on a ſpecies of preſent intemperance, and is pregnant with future miſchief.

CHAP. II.

Of Tea.

THOUGH this herb is univerſally known in the ſtate in which it is imported into Europe, yet, as few plants of it have ever been raiſed in this country, and thoſe are confined to hot-houſes, and arrive at the beſt at a very imperfect ſtate, it may not be improper to give ſome account of the growth and cultivation of this ſhrub, in the countries of which it is a native.

The tea-tree is a ſhrub that grows but ſlowly; it riſes to ſix feet, and ſometimes higher; has a black, woody, irregular, branched root. It's bark is dry, thin, weak, cheſnut-coloured, greyiſh on the ſtem, and ſomewhat inclined to green on the extremities of the twigs; it is firm, and adheres cloſely to the wood, and is covered with a very thin ſkin, which ſometimes looſens of itſelf, as the bark grows dry. This being removed, the bark appears of a greeniſh colour, and ſmells ſomewhat like the hazle-tree leaves, but more diſagreeable and offenſive; and it is of a bitter, nauſeous, and aſtringent taſte.

The wood is hard and fibrous, of a greeniſh colour, inclining to white, of a very offenſive ſmell when green; the pith, which is very ſmall, ſticks cloſe to the wood.

The branches and twigs are many in number, growing without any order, ſlender, of different ſizes, though ſhort upon the whole, wanting thoſe rings which in ſome trees and ſhrubs denote their yearly growth; very thick beſet with leaves, without any order, on ſhort, fat, green footſtalks, roundiſh and ſmooth on the back, but hollow, and ſomewhat compreſſed. On the oppoſite ſide ſtand the leaves: theſe are of a ſoft ſubſtance, between membranous and fleſhy; in ſubſtance, ſhape, colour, and ſize, when full grown, like the Morella cherry-tree. The larger leaves are near two inches long, and one broad, but vary in ſize; from a ſmall beginning they become roundiſh and broader, and then taper into a ſharp point. Some are of an oval ſhape, ſomewhat bent, and irregularly waved lengthways, depreſſed in the middle, with the extremities rolled backward; they are ſmooth on both ſides, of a dirty green colour, ſomewhat lighter on the back, where the nerves being raiſed pretty much, leave ſo many hollows or furrows on the oppoſite ſide; they are ſerrated or indented, the teeth being a little bent, hard, obtuſe, and ſet cloſe together, but of different ſizes; they have one very conſpicuous nerve in the middle, to which anſwers a deep furrow on the other ſide. It is branched on each ſide into five, ſix, or ſeven thin tranſverſe ribs, of different lengths, and bent backward near the edges of the leaves; ſome ſmaller veins run between the tranſverſe ribs.

The leaves, when freſh, are deſtitute of ſmell, and are not as the bark, ungrateful to the taſte, being indeed aſtringent and bitteriſh, but not nauſeous. They differ in ſubſtance, ſize, and ſhape, according to the different age, ſituation, and nature of the ſoil wherein they grow. Were they infuſed, and drank when they are freſh and green, they would much affect the body, eſpecially the hands; for, being narcotic, they would occaſion a trembling and convulſive motion in the nerves: but they loſe this bad quality in the drying and rolling, which expreſſes that clammy, yellowiſh, acid juice, which cauſes theſe tremors; and this juice is ſo corroſive as ſometimes to excoriate the hands of thoſe who are employed in roaſting and rolling the leaves.

The branches are thick beſet with flowers, one or two together, much like our wild roſes, an inch or better in diameter, having little ſmell, compoſed of ſix round hollow petals or leaves, ſtanding on a foot-ſtalk of an inch long, which, from a ſlender beginning, inſenſibly grow larger, and end in an uncertain number, commonly five or ſix ſmall round leaves, which ſerve inſtead of the cup. Theſe flowers continue growing till late in the winter; one or two whereof are generally ſick, ſhrunk, and fall ſhort of the largeneſs and beauty of the reſt: they have a very diſagreeable bitteriſh taſte, which chiefly affects the bottom of the tongue.

Within the flower are many white ſtamina, or chives, exceeding ſmall, as in roſes, with yellow heads, ſhaped like a heart; in one flower there are ſometimes a hundred and thirty of theſe ſtamina. The flowers are ſucceeded by great plenty of fruit, which is ſometimes compoſed of one, ſometimes of two, but more commonly of three pods, growing together to one common foot-ſtalk, as to a centre, but diſtinguiſhed by three pretty deep partitions; each pod contains a huſk, nut, and ſeeds. The nut is almoſt round on one ſide only, where the three pods grow together, ſomewhat compreſſed, covered with a thin, hardiſh, ſhining, cheſnut-coloured ſhell, which being cracked, diſcovers a reddiſh kernel, of a firm ſubſtance like filberts, at firſt of a ſweetiſh, but not of a very agreeable taſte, which ſoon grows rougher and bitter, like that of the kernels of cherry-ſtones, occaſioning thoſe who chew them to ſpit very plentifully, and when the juice falls into the throat, it is extremely nauſeous; but this ill taſte quickly goes off. Theſe kernels contain a great quantity of oil, and often turn rancid; which is the reaſon why ſcarce two of a dozen will grow when they are ſown: and this probably may have fruſtrated the attempts which have been made to raiſe this ſhrub in Europe.

The tea-ſhrub is not always allowed any particular gardens or fields, but is planted round the hedges and borders of other fields; nor do thoſe who cultivate it lay the ſeeds in rows, which would make it grow up into hedges, but at ſome diſtance from each other, that when the ſhrub comes to ſpread, the growing too cloſe together may not hinder the plucking off the leaves. They put at leaſt ſix, but moſtly twelve ſeeds, as they are contained in their ſeed-veſſels, into one hole, made five inches deep, becauſe few are found to vegetate out of that number; ſometimes two or three ſhrubs come up together, ſo cloſely joined, that the ignorant or inattentive would take them for one ſtem.

As the tea-buſhes riſe, the more induſtrious people fatten the ſoil where they grow once a year with proper manure mixed with earth. The ſhrub muſt be at leaſt three years old before the leaves are plucked, and then it bears plenty of very good ones; in ſeven years time, or thereabouts, the ſhrub riſes to man's height; but then it grows but ſlowly, and bears few leaves: but if cut down to the ſtem, new ſets of branches and twigs ſhoot out, thicker and much more numerous than before, and all nouriſhed by the ſame root. The young ſhoots, as they come up the firſt year from the ſtem, are always fewer in number, but fatter and larger than thoſe which ſucceed them; in proceſs of time they become branched.

The leaves are gathered at three different times; the firſt is gathered at the middle of the firſt moon preceding the vernal equinox. The leaves are then few in number, but very tender and young, being only of two or three days growth, and ſcarce fully opened. Theſe are accounted beſt, and are ſold deareſt of all. Theſe leaves are not gathered by handfuls, but one by one, that they may not be torn, being extremely tender; yet one perſon that is accuſtomed to it, will gather ten or twelve pounds in a day; but thoſe who are leſs experienced, not above two or three pounds.

The leaves of the ſecond ſort are larger and more grown, and, though gathered but a little after the firſt, bears a very inferior price.

The third and laſt ſort is gathered in our June; this is moſt plentiful, the leaves being come to their full growth, both as to their number and largeneſs. Many omit the two former, and depend wholly on this gathering, the leaves whereof are all ſorted into their different claſſes of ſize and goodneſs, called the firſt, ſecond, and third ſort; the laſt of which is coarſeſt of all, being between two and three months grown, and falls to the ſhare of the loweſt rank. Of this ſort the labourers gather ten or twelve pounds a day. The longer this is kept the better it is; it's virtues being fixed in the groſs leaves, are not ſo eaſily loſt, either by being expoſed to the air, infuſed, or boiled; but the other ſorts ſuffer greatly by any of the three.

When the leaves are gathered, they are brought to the warehouſe to be dried the ſame day, over a fire in an iron pan; for if they lie long, are laid on large heaps, or kept over night, they heat, turn black, and loſe much of their virtue: and if they happen to heat at any time, they preſently fan them, and ſpread them thin on the ground to cool them. Thoſe who are employed in this buſineſs put ſeveral pounds of the leaves into the pan at once, which is ſo heated, that the leaves, though thick and juicy when put in, yet ſoon crack at the edges of the pan: and that they may be thoroughly and equally dried, they are conſtantly ſtirred with the hands, till they are as hot as the man who attends can poſſibly bear them; he then takes them out with a ſhovel like a fan, and throws them on a mat, after which perſons are employed to roll them with the palms of their hands, in ſmall parcels, till they are equally curled; and ſuch a ſharp, yellow, and greeniſh juice, ſweats out of the leaves upon this rolling, as burns their hands to an almoſt intolerable degree; but ſtill they muſt continue their work; for if the leaves are quite cold before they are rolled, they will either not curl, or not keep it long; but after they are rolled, the ſooner they cool the better, for they keep their curl the longer; therefore they have one to fan while another is rolling them. When they are cold, the man who attends the drying, and who is the overſeer of the workhouſe, puts them a ſecond time into the pans, and dries them again, till they have loſt all their juices: but in this ſecond heating, he ſtirs them more ſlowly than before, leſt he ſhould bring them out of their curls; though ſome leaves will ſpread in ſpite of all his care. After this ſecond drying, they are carefully rolled again in the ſame manner as before; and if they now appear to be perfectly dry, the work is done; if not, they are committed a third time to the drying pan, and now the utmoſt care and ſkill is neceſſary, leſt they ſhould be burned or blackened. Some curious perſons dry and roll them ſix or ſeven times, but uſe a ſlower fire, that the leaves may preſerve their greenneſs; and becauſe of the ſharp juice which ſweats out of them, the pan is clean waſhed after every drying. It is ſaid that the Chineſe, before they dry the leaves of the firſt gathering, put them into hot water about half a minute, that they may ſooner and more fully ſweat out a juice which they ſuppoſe to be noxious.

When they have done drying and rolling them, they again lay them out on a mat and ſort them a ſecond time into different parcels, according to their goodneſs, ſeparating thoſe which are leſs curled, or too much burnt, from the reſt. The common people dry the leaves in earthen kettles; and as they are at a leſs expence this way, ſo they can afford them cheaper, though they are very little if any thing worſe.

The tea muſt be all dried in the night, being gathered in the day. When the leaves have been kept ſome months after theſe dryings they turn them all out, and heat them again, to take out any remaining moiſture, or what they may ſince have imbibed.

As ſoon as the tea is cooled, after this laſt operation, the Chineſe put it up in wooden cheſts or caſes of fir lined with lead, all the chinks whereof are carefully ſtopped with paper, that the air of thoſe climates may not diſſipate it's extreme ſubtile and volatile parts; and in this manner it is ſent to Europe.

Tea has not been known in Europe quite two hundred years; the Dutch Eaſt India company, who firſt imported it, and raiſed it's reputation with us, was founded in 1602. The Engliſh Eaſt India company was formed near the latter end of Queen Elizabeth's reign, their charter bearing date in 1599, and their fleet ſet out in 1600; but they made no figure till King James the Firſt beſtowed his favours on them. The French Eaſt India company was eſtabliſhed in 1664.

The Dutch, in their ſecond voyage to China, carried thither a large quantity of dried ſage, and exchanged every pound of it for three or four pounds of tea, extolling the European herb, and attributing to it far more and greater virtues than the leaf of the Chineſe ſhrub could poſſibly be poſſeſſed of; but not exporting ſo large a cargo of ſage as they imported of tea, they bought a great deal of the latter commodity in China, at eight pence or ten pence a pound. When this was firſt imported into Europe it was ſold at Paris for thirty livres a pound, though it was not of the beſt kind, and that which was brought from Japan, and was accounted much better, has often been ſold at one hundred livres a pound. About ſixty or ſeventy years ago, the Chineſe ſold it at three pence, and never above nine pence a pound, and often mixed other herbs with it to increaſe it's weight.

Though it ſeems to have been brought into England during the reign of King James the Firſt, yet we find little notice of it before the uſurpation, when, or about the reſtoration, it was imported in ſuch large quantities, that it came under the cognizance of that government; for, in 1660, a duty of eight pence a gallon was laid on the tea made and ſold in all coffee-houſes (but it does not certainly appear whether this was the firſt duty laid on it, or only a renewal of it, in the ſame or ſome other ſhape) which was no ſmall prejudice to the liquor, and inconvenience to it's drinkers; for the exciſe-officer was to ſurvey it after it was made, before any could be ſold, and did not perform that duty above once or twice a day. Ever ſince that time, the duty on tea has been made one of the hereditary cuſtoms to the crown, though the parliament has at ſundry times, by different acts, fixed divers duties on it.

Green tea ſhould be choſen freſh, of a fine colour, not inclining to a yellowiſh or a browniſh colour, which are marks of too great age; it ſhould be well rolled, conſiſt of entire leaves, be thoroughly dry, of a bitteriſh gently-aſtringent taſte, but not ungrateful, and of a pleaſant ſmell; the freſher the tea, the greener is the infuſion that is made of it with water; it's prevailing ſmell is that of violets, or of new hay; but if it is ſtrong of theſe, it is ſo by art. Bohea tea is of a blackiſh brown colour; it gives a brown tincture to water, and ſmells of roſes. Of all the ſubſtitutes for tea, the male ſpeedwell is the moſt celebrated. The green colour of tea reſides wholly in it's reſinous part, and ſo does it's aſtringency.

An infuſion of tea in water is a grateful diluting liquor in health, and a ſalutary drink in ſickneſs; it promotes the natural excretions, excites an appetite, checks immoderate ſleepineſs, and relieves the head-ache when cauſed by a debauch. No other plant is known whoſe infuſion more readily paſſes off by the ordinary ſecretions, or more ſpeedily excites the ſpirits. When the ſtomach is weak, a moderately ſtrong infuſion of tea generally provokes a vomiting.

Theſe are the qualities of this herb, in the opinions of the moſt able and ingenious medical writers, whoſe concurrent teſtimony hardly admits of being diſputed.

Yet certain it is, that the uſe of the wholeſome liquor produced from the infuſion of tea, is attended with fatal conſequences in many inſtances; but it is the improper and immoderate uſe of it which is productive of the numerous ills attributed to this innocent herb, and not any noxious quality which it poſſeſſes: and thus intemperance and exceſs will convert to evils the greateſt bleſſings of life, rendering the moſt nutritive food poiſonous, and the moſt ſalutary liquors pernicious.

And if we conſider the manner in which tea is uſually taken, we ſhall ceaſe to be ſurprized at it's producing dangerous effects. When the ſtomach has been emptied by the inſenſible as well as the ſenſible evacuations, and when it has remained for twelve or fourteen hours without any ſupply of food, it is our daily cuſtom to pour into it large quantities of the weak and watery liquor, overloading that organ, waſhing it, and weakening it's tones, at a time when the powers of digeſtion are without employment, and it has free acceſs to the tender coats of the ſtomach, which are at that time bare and unſheathed; and among the higher claſſes, who from late ſuppers, late hours, and other nocturnal debauches, are without any morning appetite, the tea conſtitutes the breakfaſt, unaccompanied with bread, or any other eatable.

But the moſt pernicious part of this daily ceremony remains yet to be mentioned; this potation is ſwallowed boiling hot, and being poured out in ſmall cups, and the tea-pot repleniſhed with water between every filling, the heat is kept up to the laſt diſh, and during the whole meal fuel is continually adding to the fire.

Nor is the uſe of tea confined to a ſingle meal; it is repeated in the ſame quantities, and in the ſame manner, a ſecond time in the day: another load of this boiling liquid is thrown in after dinner; and though the conſequences of taking it at this time of the day may not be ſo deſtructive as breakfaſting upon it, yet this additional load contributes to the injury which the conſtitution unqueſtionably receives from the morning potations.

And under theſe circumſtances it is, that we ſee immoderate tea-drinkers relaxed in their ſolids, feeble and weak in body, unable to digeſt ſolid food, and ſubject to the whole train of hyſteric and hypochondriac complaints.

Our readers will perceive, that we mean to leave them in the undiſturbed poſſeſſion of their favourite liquor; which we are inclined to believe may be rather rendered ſalutary than pernicious, by obſerving the regulations which we mean to offer to thoſe who wiſh to retain the uſe of this agreeable beverage, without preſent injury or future inconvenience.

We would adviſe our tea-drinking readers never to ſwallow a ſingle diſh for breakfaſt unaccompanied by ſome eatable.

To ſip of the tea, and take a mouthful of the bread and butter or other food alternately, ſo that the ſolid and liquid may mingle in the ſtomach immediately as they are ſwallowed.

Never to drink it of any degree of heat beyond that of milk from the cow.

Never to drink it without ſugar and milk, if the latter is to be had, but by no means without the former.

Not to exceed, at any one time, four common tea-cups, or about half a pint.

Not to drink tea late in the evening, or to take it the laſt thing before retiring to reſt.

Under theſe reſtrictions, a conformity to which is attended with no ſort of difficulty, tea may be uſed freely, withous the ſmalleſt apprehenſion of producing indiſpoſition, or injuring the conſtitution.

CHAP. III.

Of Coffee.

THE word *coffee* is derived from the Arabian *cahoua*, which ſignifying any kind of liquor, the Arabians apply it by way of pre-eminence, to that which is drawn from the berries which we call coffee, the beverage in which they moſt delight.

The tree or ſhrub which produces coffee is ſomewhat of the jeſſamine kind; it's leaves reſembling in colour and figure thoſe of the bay-tree; the fruit is a juicy berry which incloſes two ſeeds, of a pale colour and oval ſhape, flat on one ſide and convex on the other; and theſe join on the flat ſides, having each a ſmall furrow to admit a kind of filament or thread, which paſſes from the ſtem of the fruit to the oppoſite extremity.

The coffee-tree is a native of Arabia Felix, and probably of the iſland of Java in the Eaſt-Indies, where it is now cultivated in conſiderable quantities, producing thoſe ſeeds, or, as they are commonly called, berries, which are imported into England under the name of Eaſt India coffee, to diſtinguiſh it as well from Arabian, or, as it is more commonly called, Turky coffee, and that coffee which is the growth of the Weſt Indies, where it has been introduced from Arabia, and from whence the European markets are ſupplied with large cargoes of this commodity; though that which is imported from Arabia is preferred to either of the other ſorts, from which it may be diſtinguiſhed by the ſmallneſs of the berries, and the colour of them being rather more tranſparently grey, than either the Eaſt or Weſt Indian coffee.

Many Arabians of rank prefer the huſks or ſkins which incloſe the ſeeds, which are in fact the berries themſelves, in a withered or dry ſtate, to the berry, and are of opinion that the decoction is of a more pleaſant flavour; but this part of the coffee fruit will not bear keeping, and conſequently cannot be exported.

Coffee was ſcarce known in Europe till the ſeventeenth century: the firſt coffee-houſe in London was opened in the Tilt-yard in the year 1652. In Paris, where it is now much more univerſally uſed, it was not introduced till ſixteen or ſeventeen years later, though it had been taſted at Marſeilles even earlier than in England. Soon after it began to be drank in London, two foreign writers publiſhed diſſertations on it's nature and qualities, one in German, the other in Italian.

The berries or ſeeds of coffee are nearly without ſmell, but have a mealy, oily, and ſomewhat bitteriſh taſte; in common with other farinaceous ſubſtances, they are of a flatulent nature, but loſe that quality by burning or roaſting. Chymiſts and naturaliſts have endeavoured to diſcover what ſubſtances moſt nearly reſemble coffee in taſte and ſmell, and find that roaſted rye and roaſted almonds mixed, but in a leſs proportion of the latter to the former, as being only neceſſary to ſupply the oleous part, comes the neareſt to it; and this is probably the compoſition which has been ſold under the name of Engliſh coffee.

When the roaſted berries are reduced to powder, they ſoon loſe their ſmell and flavour, but keep well in the berry; and if before they are ground for uſe, they are placed before the fire for a few minutes, and powdered whilſt they are warm, the liquor drawn from this powder will be as briſk and highly flavoured as that which is made from newly roaſted berries.

Contrary to the uſual practice, coffee is thought to be moſt wholeſome when it has been boiled eight or ten hours before it is drank, and it ſhould then be mixed with an equal quantity of milk.

Taken within an hour after dinner, it is ſaid to moderate the fermentation of the aliment, and to be of uſe in head-aches, occaſioned by weakneſſes of the ſtomach, too cloſe attention to ſtudy or buſineſs, or exceſſes; it is alſo ſuppoſed to aſſiſt digeſtion, and to be ſomewhat antiputreſcent; and it is recommended to thoſe who are corpulent, phlegmatic, and apt to be diſturbed and agitated.

But it is aſtringent, heating, and drying; and the uſe of any conſiderable quantities of this liquor renders the body thin, and the complexion pale and yellow: the moderate manner in which it is taken in England ſeldom produces any of theſe inconveniences, but the Turks and other Mahometans, whoſe religion does not permit them to indulge in wine or other ſtrong liquors, drink amazing quantities of coffee; and the French and other European nations generally breakfaſt on it inſtead of tea, and drink it regularly every day after dinner.

Upon the whole, it does not appear that the ſeed itſelf is unwholeſome, but that the immoderate uſe of it, and particularly by thoſe of thin and ſpare habits of body, may be attended with inconveniences.

CHAP. IV.

Of Tobacco.

TOBACCO hath large, ſharp-pointed, pale-green leaves, about two feet in length, joined immediately to the ſtem without foot-ſtalks. It was brought into Europe by Monſieur Nicott, a Frenchman, from whom it is called Nicotiano; he brought it from the iſland of Tobago in America, about the year 1560; but it is now cultivated in many parts of Europe, and particularly in very conſiderable quantities about St. Omer's, and other towns in French Flanders. Sir Francis Drake firſt brought it into England; and Sir Walter Raleigh introduced the uſe of it as a kind of faſhion in England.

The leaves have a ſtrong diſagreeable ſmell, and a burning acrid taſte; they give out their active parts both to water and to ſpirit, but moſt perfectly to the latter; but their acrimony is much abated in the tincture, the watery extract being leſs pungent than the leaves themſelves; and the ſpirituous not much more ſo. The American tobacco is ſtronger than that which is raiſed in France, or the ſmall quantities cultivated in England, and affords a more fiery extract, though in leſs quantity.

If tobacco is taken inwardly in a ſmall doſe, or if a decoction of it is uſed as a clyſter, it proves violently cathartic and emetic, occaſioning extreme anxiety, giddineſs, ſtupefaction, and diſorders of the ſenſes; however, ſome have ventured on it in ſome obſtinate chronical diſorders. By long boiling in water, it's deleterious power is abated, and at length deſtroyed. The ſmoke of tobacco received by the fundament, is of ſingular efficacy in obſtinate coſtiveneſs of the belly, for deſtroying the worms which infeſt the extremity of the gut; and for recovering perſons apparently drowned.

Tobacco is ſometimes uſed in lotions and ointments for cleanſing foul ulcers, and deſtroying inſects in the ſkin; it is deſtruction to all inſects whether in the vegetable or animal world. Beat into a poultice with vinegar, and applied to the region of the hypochondriac or ſpleen, it hath been known to diſcuſs humours there.

A conſtant chewing or ſmoaking of tobacco deſtroys the appetite, by depriving the conſtitution of too much ſaliva; however, though it is improper for lean, dry, and hectic habits, moderately taken in either way, it may be uſeful to thoſe of groſs habits and very moiſt temperaments, and to ſuch as are ſubject to diſeaſes of the colder kind. When the gums are overcharged with rheum, or when the lungs are ſwelled and inclined to impoſthumate, tobacco may be uſeful.

The oil of the tobacco which aſcends in the ſmoak, blackens the teeth and decays them, and the continual uſe of the pipe occaſions a perpetual thirſt, which inclines the ſmoker to indulge in a greater quantity of liquors, than is conſiſtent with health or ſobriety.

Nor are inſtances wanting of very dangerous effects produced by this very acrimonious herb.

A young recruit who had been inliſted in one of the interior provinces of England, and ſent up to the Savoy, having learnt in his new profeſſion to drink drams and chew tobacco, and having in a ſtate of intoxication occaſioned by the uſe of the former, ſwallowed a quantity of the juice of the latter, from a large piece of it with which his mouth was crammed, was ſeized with a vomitting which was ſoon followed by a purging, and the diſcharge both ways was enormous, and both tinctured with blood. After theſe evacuations had continued violently for about an hour, he fell into a profound ſleep, from which, however, he awoke in ſtrong convulſions; and in the remiſſions, he ſeemed to have loſt his ſenſes, laughing and crying alternately, his ſight ſeemed exceedingly obſcure, he was totally without recollection or knowledge of thoſe about him, and ſeemed to be compleatly mad.

Growing more compoſed after ſome time, he ſlept again, but his breathing was difficult, his lips ſwelled, his face became red and blotched, his lower-jaw dropped, he was covered with cold ſweats, and at times apparently dead, till the vomitting recurred, and the retching and ſickneſs ſeemed to reſtore his life.

Being young and of a ſtrong and robuſt conſtitution he recovered, but he complained for a long time after of a ſenſation like fire in his ſtomach, and had a continued hiccough, which was conquered with great difficulty.

A woman ſervant to a gentleman in the country was adviſed to thruſt a piece of pigtail tobacco up her noſtril, as a remedy for giddineſs in the head; ſhe accordingly ſuffered it to remain there when ſhe went to reſt, laying her head off the pillow, as may be ſuppoſed to favour any defluxion which it might occaſion; but ſoon after midnight ſhe awoke intolerably ſick, vomitted frequently and very violently, and fell into ſtrong hyſteric fits, in ſome of which ſhe lay as if ſhe was dead for a conſiderable time together, and when theſe fits left her, became ſtupid and ſleepy, her mind ſeeming diſturbed, and her pulſe irregular and unequal. After ſome time ſhe fell into a profuſe ſweat, emitting a moſt offenſive cadaverous ſmell, but this evacuation brought her relief, though ſhe continued for a long time after to be affectedwith a trembling of the limbs, as if ſhe had been paralytic.

A perſon had a contuſion on the thigh, accompanied with a wound, and attended with ſome alarming ſymptoms; to this wound an ointment was applied by the direction of a ſurgeon, who had conceived an opinion of this herb, in which the powder of the dried leaf of tobacco was an ingredient; but ſoon after this application, the patient was ſeized with exceſſive vomittings, which could not be reſtrained without extreme difficulty; and the cauſe not being immediately diſcovered, the tobacco dreſſing was renewed, when the ſame conſequences enſued, which having pointed out the occaſion, the dreſſings were changed, and the tobacco omitted, after which the vomitting went off ſpontaneouſly, and came on no more till the cure was compleated.

When from any inadvertency quantities of this herb, or of the juice of it, have been taken internally, and have produced all or any of the effects above deſcribed; the unlucky patient ſhould be treated in the ſame manner as we have already directed for thoſe who have ſwallowed any of the vegetable poiſons.

Even the ſmoke of tobacco frequently produces very ſevere ſickneſs, giddineſs, and other indiſpoſitions, to thoſe who are unuſed to it; and thoſe who are accuſtomed to ſmoak, but happen to ſleep with pipes in their mouths, and by that means ſwallow the tobacco-ſmoke, are frequently affected in the ſame way, waking in great agonies.

CHAP. V.

Of Snuff.

THE dry leaves of tobacco reduced to powder by grinding, raſping, or beating, make what is called *ſnuff*.

We may better judge of the effects this powder may produce on being taken into the noſtrils, if we acquaint ourſelves with the ſtructure of the parts which it may reach. And this ought to have been a conſideration prior to the firſt uſe of the herb in that manner; and it may be affirmed, that, if it had been ſo conſidered, this method of taking it could never have been introduced.

No part of the human frame is more delicately ſenſible than the noſtrils; which are covered, in a manner, with branches of nerves; and theſe ſo thinly guarded from the air, that the brain itſelf may be ſaid to lie, in a manner, naked there. This conſtruction was eſſential to the delicate ſenſe of ſmelling; the proviſion made for which is, like all other parts of the human frame, the apparent work of Infinite Wiſdom.

Theſe nerves eaſily irritated, are as eaſily deſtroyed. Nature is always on her guard againſt injury, and will uſe violent, and even convulſive efforts, to preſerve herſelf; but the induſtry of man may overcome them all. Thus, when ſnuff is taken, by a perſon unaccuſtomed to it, the irritation is exceſſive, and ends in ſneezing: this is a ſucceſsful effort of nature to throw off the offending matter. The acrimonious powder is only received into the open noſtril; it is from thence immediately expelled by the ſhock: and being followed by a plentiful diſcharge of watery fluid, every remain of it is waſhed away, and in this caſe the ſnuff acts by it's acrimony only: there is not time for it to exert the other pernicious qualities which it poſſeſſes in a ſtrong degree.

The effects we have deſcribed are thoſe which take place on a perſon unuſed to ſnuff: cuſtom gets the better of nature's abhorrence to that powder. A due degree of this effect can only be produced when the nerves of the noſtrils are in a perfect ſtate; the acrimonious ſubſtances which firſt irritate thoſe tender organs, afterwards deſtroy them: and on this account perſons who are habituated to ſnuff-taking, no longer ſneeze when they take it. The powder, which at firſt excited thoſe irritations by which it was thrown off ſo violently, is permitted to lodge and to exert all it's force; thus are the nerves corroded, their delicate ſenſibility deſtroyed, and the ſenſe of ſmelling impaired, and at length totally loſt.

Nor is this all; nature, who provides for many purpoſes, in the ſame way, conſtituted this delicate ſenſation of the noſtrils, not only for the agreeable and uſeful ſenſe of ſmelling, but to defend and guard thoſe ſecond paſſages to the throat.

The paſſage by the mouth we can ſhut at pleaſure; but theſe other inlets are continually open; and without ſome particular guard, ſubſtances improper to be ſwallowed might get down this way by accident, beſides the acrimonious powder which is forced in by art.

But nature has given againſt theſe accidents a kind of external defence, in thoſe ſhort hairs which grow near the openings of the noſtrils; and to men a much greater, which cuſtom takes away in moſt parts of the world, which is the part of our beard that grows on the upper lip. Theſe natural guards will in a great meaſure prevent the intruſion of offenſive ſubſtances; and if they ſhould find admittance, we have ſtill another proviſion againſt our ſuffering by them, in that delicate ſenſibility in the nervous lining of the noſtrils, which, on the firſt touch of any thing acrid, produces ſneezing to caſt it off.

But theſe proviſions of nature againſt the accidental ſwallowing of acrimonious things, are induſtriouſly ſubverted in ſnuff-taking. A few ſcattered hairs are no defence againſt the application of a finger and thumb preſſed to the very opening of the noſtril, and charged with ſnuff which is drawn up with the force of all our breath; for this is the manner in which we compel the noſtrils to receive this acrid and more than half poiſonous powder of tobacco: and, by continued repetitions of this application, thoſe nerves are deſtroyed which would excite ſneezing to diſcharge it.

And in this manner is the ſnuff received and retained in the cavity of the noſtrils: tincturing the fluid which is naturally diſcharged by the glands of the noſe; and ſome of this making it's way unoppoſed, with the ſaliva or proper liquors of the mouth, will be drawn into the ſtomach; and it is here only according to the judgment of ſome phyſicians that it begins to be injurious; but we ſhall hereafter offer the reaſons which have induced us to form a contrary opinion.

It is an unqueſtioned fact that the ſaliva aſſiſts the juices of the ſtomach in the digeſtion of our food: it cannot therefore be encreaſed without hurt, nor altered in it's quality without injury. The acrimony of ſnuff tends to produce the former effect, by ſtimulating the glands which diſcharge the ſaliva; and that it's very nature is altered, is apparent by the tincture which it gives, and which muſt be, from the quality of the herb, ſtupifying and acrimonious.

We know that all ſubſtances of this kind weaken the ſtomach, deſtroy the appetite, and prevent digeſtion; but this by the mixture of a peculiar acrimony, diſturbs the natural operations of the ſtomach, even while it's force is deſtroyed by the ſtupifying quality.

Hence it will appear that a habit of taking ſnuff muſt occaſion diſorders of the ſtomach, and bring on all the miſchiefs which attend a bad digeſtion. But there is yet to be conſidered the gullet, or paſſage from the mouth to the ſtomach, through which it muſt paſs down; the conſtruction of which is as delicate and as ſenſible of injuries even as the membrane of the noſtrils; beſides this farther dreadful conſideration, that injuries to this part are beyond the reach of art, as it is too far removed from the ſurface of the body to be capable of relief from the ſurgeon's hand, and therefore hurts of it are in many caſes mortal.

The gullet has, as well as the ſtomach, a great number of nerves, extremely ſenſible of irritation; but, beſides theſe, it's inner coat being full of open veſſels, it is greatly irritated from the tincture of the ſnuff even before that tincture reaches the ſtomach.

Snuff does not cauſe thoſe to ſneeze who are accuſtomed to it, nor are they diſappointed; for they neither expect or deſire it ſhould. This is, indeed, the immediate cauſe of it's effective qualities, but it is alſo attended with the moſt imminent danger. The delicate and downy ſubſtance of the lining of the gullet, while it receives the virtues of the ſaliva, ſtrongly impregnated with ſnuff, may by accident alſo detain a portion of it; and from the irritation which it will occaſion, when lodged upon ſo tender a part, and which is ſo largely ſupplied with blood-veſſels, an inflammation will naturally ariſe beyond the reach of any hand, with an extenſion of the injured part, the progreſs of which can hardly be ſtopped, and the end of which muſt be moſt probably fatal.

According, then, to the progreſs of this pernicious powder, the firſt effect of it will be on the nerves of the noſtrils, where it is firſt received; and which, from their own tender nature, and the acrimony of th powder applied to them, will be deſtroyed. And this will certainly happen from a continued uſe of ſnuff; but the miſchief will be compleat ſooner in ſome than in others, according to the particular ſtructure of the part, which is not exactly alike in any two human bodies.

When theſe nerves are deſtroyed, the ſenſe of ſmelling, which depends on them, will periſh of courſe; and, in ſome degree alſo, that peculiar ſenſation which is of a middle nature, as it were, between ſmell and taſte, by which we diſtinguiſh the more delicate flavour of what we eat; and which we have deſcribed and accounted for in a former part of this work. And though the loſs of theſe ſenſes is not attended with any immediate danger to life, yet it is giving up what muſt be allowed at leaſt very pleaſing, for a very unequal cauſe.

We have formerly obſerved, that the ſenſe of what we call the flavour of fruits, and of the more delicate foods, depends, as well as every ſpecies of taſte, upon the nerves, which are diſtributed over the ſurface of the tongue; and as the laſt is always impaired, ſo is the former utterly loſt by the immoderate uſe of ſnuff.

But as the diſtinguiſhing ſenſe of the different flavours of bodies, is a more delicate kind of taſte, it will therefore be firſt injured; eſpecially as the mixture of ſmelling, which is evidently concerned, ſhews that the nerves of the noſtrils have ſome ſhare in it.

In order to enjoy this ſenſe in perfection, the nerves muſt be kept in an uninjured ſtate, and the mouth muſt have a due degree of moiſture, but not an exceſs. For which reaſon, infants, whoſe mouths are more moiſt than thoſe of men, have not the ſame delicate ſenſe of it, the extremities of their nerves not lying ſufficiently expoſed; and in perſons of very advanced ages this ſenſation is leſs delicate, becauſe the nerves are waſted. Snuff will reduce thoſe who uſe it to a worſe condition than either infants or the aged: it always tinctures the fluid of the mouth, and ſometimes by accident gets down in ſubſtance; and in this laſt caſe acts violently on thoſe tender and almoſt naked nerves, from which we enjoy the flavour of the nicer foods, and by it's acrimony would preſently deſtroy them, but that a great quantity of water being drawn immediately into the mouth, by the effect of the ſame acrimony on the glands, the nauſeouſneſs of it's taſte occaſions natural and violent efforts to ſpit it out.

The ſnuff, therefore, which falls entire into the mouth, is ſoon waſhed off from the ſurface of the tongue, and diſcharged; but not till it has firſt injured very ſeverely the nerves of the part on which it has immediately fallen.

But the ſaliva, continually tinctured by the ſnuff, and ſpread over the tongue, being ſuffered with leſs violence to nature, lodges there at all times, and works ſlowly, but certainly the very ſame effect which the ſnuff in ſubſtance would have done if it could have remained in the ſame ſituation; deſtroying entirely by it's acrimony the exterior branches of the nerves of the tongue, in the ſame manner as a drop of oil of cloves, or of tobacco, which act alike in this reſpect, will deſtroy the nerve in an aching tooth.

It has been always remarked, that the ſlower operations are generally the moſt ſure. At firſt, when the habit of ſnuff is new, the quantity taken is but ſmall; and of that by far the greater part is thrown off by ſneezing, or is blown out of the noſe ſoon after it is ſnuffed up, in conſequence of it's irritation; yet the liquors both of the mouth and noſe are ſomewhat diſcoloured by it. Thus far the taſte, though in itſelf diſguſtful, is but ſlight, the tongue bears it, though not without uneaſineſs, yet without being much offended; and beginning to be accuſtomed, it gradually bears a little and a little more: it's own exquiſite ſenſation begins alſo by almoſt imperceptible degrees to be palled; and after ſome time is ſo far loſt, that although the taſte of ſweet and bitter, ſalt or ſour, poignant and ſtrong, and the other coarſer diſtinctions may remain, yet that delicate ſenſation, which we have already mentioned as the taſte or diſtinction of flavours, is altogether loſt.

And if this were all, one ſhould be apt to think any reaſonable perſon would apprehend it too much to ſacrifice for the indulgence of ſnuff: yet this is not the caſe; thoſe who have ſo totally loſt the moſt delicate ſenſation of flavours, muſt have impaired their taſtes with regard to other matters; imperfections which come on ſlowly, are not eaſily perceived, but ſhould therefore be more ſtrictly guarded againſt; and it would be worth while for any man to conſider, before it is too late, whether he will indulge in a habit of taking ſnuff at the certain expence of two of his five ſenſes; and whether for the ſake of that ridiculous and abſurd cuſtom, he will give up for ever the fragrance of flowers, and the flavour and fine taſte of fruits, foods, and wines.

And even if there ſhould be any, who after this ſtate of the account are of opinion that the indulgence of ſnuff is worth this price, let them be told, that theſe are the leaſt of the many ſacrifices which they may in the end be compelled to make to that practice: the phyſician and the ſurgeon muſt probably be conſulted for other conſequences; and, beſides giving up ſome of the moſt pleaſing ſenſations which the human frame is capable of receiving, they muſt expect it's worſt imperfections and moſt painful and dangerous diſeaſes.

Snuff is by it's acrimony capable of producing, in thoſe parts with which it immediately or accidentally comes in contact, ſwellings and excreſcences, which, in ſome caſes, require to be extirpated by ſevere operations of ſurgery; and in others become fatal, becauſe they lie beyond the reach of the operator: and the participation of it's qualities to the juices of the mouth and throat, may in time ſo far pervert and impair the actions of the ſtomach, as to bring on a variety of diſeaſes.

But though ſnuff effects the miſchiefs we have deſcribed in ſome inſtances, yet it does not always appear to be attended with the ſame conſequences; nor is this ſurprizing. In many perſons it occaſions diſorders, which perhaps are not attributed to it. But though it ſhould be admitted that but few are injured, in compariſon to the numbers of thoſe who take ſnuff, is it not the extremeſt folly to riſque being among the liſt of ſufferers? And, if only two in twenty ruined their conſtitutions by it, who ſhall be able to ſay, when he acquires this habit, whether he ſhall be one of the eighteen who eſcape, or of the unfortunate two who are deſtroyed by it?

An elderly gentleman, who had been many years addicted to ſnuff-taking, was by degrees affected with a kind of ſuffocation, and could not breathe but with his mouth open; from his right-noſtril hung the end of a polypus, or fleſhy tumor, the remainder of which filled the cavity on that ſide, and entirely prevented his breathing through that noſtril; the other he could make very little uſe of from a like cauſe; nothing, however, appeared externally on that ſide, but the ſame ſwelling was perceivable within. Yet among all this unfortunate perſon's ſufferings, nothing ſeemed to affect him ſo much as his being no longer able to take ſnuff, to which he had been ſo long accuſtomed.

Some time after, a ſurgeon of eminence undertook and performed a cure, after many had declined it; which he compleated by attacking, from within his patient's mouth, what could not be got at by the way of the noſtrils. But the greateſt advantage of all was, that his long diſuſe of ſnuff, with the ſenſe of the miſchief it had done him, prevented his returning to the cuſtom, and inſured a continuance of his health, which he enjoyed for many years after, uninterrupted by the ſmalleſt return of his old complaint.

A gentleman ſomewhat advanced in years, having been early accuſtomed to ſnuff, and finding himſelf unhappy, that, from the conſtant and long uſe of it, he felt leſs and leſs of the effect, endeavoured to find ſome of a ſtronger and more acrimonious kind, and at length met with a ſort which gave him the higheſt ſatisfaction; for, whether it aroſe from peculiar management of the tobacco, or was occaſioned by the addition of ſome other ingredients, the ſnuff he had now diſcovered was ſo acrid, that few beſide himſelf could endure it.

But the pleaſure which he found in his new acquiſition was but ſhort-lived; for, after a little time, two ſwellings of a fleſhy ſubſtance were perceived in one of his noſtrils, and one in the other, which grew ſo faſt, that in eight or ten days one of them hung a conſiderable way out of one noſtril, and the others began to be viſible in the opening of the other.

The large ſwelling which filled the right-noſtril alone, having thruſt itſelf out beyond the end of the noſtril, began to grow the other way alſo, and forcing itſelf back through the opening of the noſtril into the mouth, increaſed there very faſt, and reduced him to a miſerable condition: his breathing and ſwallowing were attended with great difficulty, and he could hardly ſpeak ſo as to be underſtood.

Theſe ſwellings appearing of a deep crimſon, and being extremely painful, he was at firſt alarmed with the apprehenſion of a cancer; but a ſurgeon being ſent for, he was ſoon eaſed of his anxiety on that ſcore, though the cure of the real diſorder was not effected without great pain. The acrimony of the ſnuff only had occaſioned the ſwellings, which there was no poſſibility of diſperſing, or any other way of getting rid of, but by cutting them out, which was performed with ſucceſs, and the blood that followed the inſtruments alſo carried off the inflammation. This operation was abſolutely neceſſary to the preſervation of life; for, that part of the large polypus which had extended itſelf to the mouth, increaſed ſo faſt, that the patient was in imminent danger of being ſuffocated.

Another gentleman, equally unfortunate, after a long and immoderate uſe of ſnuff, found that his breath paſſed with difficulty through one of his noſtrils, the complaint gradually increaſed, till he perceived a ſwelling within, which was hard, but unattended with pain. It continued, however, to grow ſlowly, till at length it filled up the whole noſtril, and by the ſwelling obſtructed the breathing of the other: he now found it neceſſary to apply for aſſiſtance. The ſwelling turned quite black, and adhered by a broad baſe, ſo that it could neither be taken away by the knife or ligature: it ſtill, however, occaſioned no great pain, but an unconquerable itching in the lower part of it. He was earneſtly cautioned to avoid ſcratching it, but in vain: he could not be prevailed on to forbear, and the conſequence of his perſiſting was a diſcharge of a thin acrid humour, with dreadful pain, and all the frightful ſymptoms of an open cancer. He tried hemlock, but without ſucceſs; it produced no good, though it had no ill effect in him, and he lingered out his life without relief, or even hope.

Theſe caſes, in both which the complaint firſt appeared after taking a kind of ſnuff different from that to which the perſon was accuſtomed, though ſold under the ſame name, afford reaſon to ſuſpect, that ingredients of a worſe nature than tobacco itſelf are ſometimes added by bad perſons to the compoſition of ſnuff; and it has been confidently aſſerted by ſome perſons, that glaſs reduced to powder is among them; though we hope, for the credit of humanity, that it is impoſſible to find any perſon baſe enough to adminiſter poiſon in this way for the ſake of private emolument.

But if it ſhould be argued, that the polypuſes which attack ſnuff-takers are not abſolutely cauſed by that cuſtom, and that the principles of the diſorder were there before; yet it will not be denied that ſnuff irritates the parts and haſtens the miſchief; and even ſuppoſing the latter only to be the caſe, the injury is certainly greater than the indulgence is worth: nor can it be abſolutely pronounced that ſnuff is not the cauſe, or determined who has or who has not the ſeeds of ſuch a diſorder as ſnuff may bring into action.

And as cancers of the noſe are as dreadful and as fatal as any others, it is certain that ſnuff muſt be of all things in the world the moſt dangerous, where there is the leaſt diſpoſition toward them; for, in ſuch caſes, almoſt all that can be done is, to keep the parts quiet, and the irritation of them is moſt to be avoided; and nothing can be conceived ſo irritating as the ſnuff which is perpetually poured up the noſtrils.

But the injuries occaſioned by ſnuff are not confined to the noſtrils; the throat or gullet partakes of them; and not only reaſon but experience ſhews it may do the moſt terrible miſchief there.

A poor old woman, in a diſtant part of the kingdom, was reduced to ſuch a ſtate by a ſwelling within her throat, that ſhe was fed with broth by means of the ſtem of a tobacco-pipe; by ſucking at one end of which, while the other was plunged into the baſon, ſhe could with great difficulty, and in the ſpace of an hour or more, get down as much as was ſufficient to ſupport life. The account ſhe gave of the beginning of the diſorder, was, that it aroſe from ſwallowing ſome ſnuff, which ſhe had too haſtily drawn up her noſtrils.

A ſimilar inſtance is recorded in medical books: A perſon who took great quantities of ſnuff, perceived, after a time, a diſorder in his throat, occaſioning a difficulty of ſwallowing. No medicines could reach the cauſe; and when an inſtrument was thruſt down, it ſtuck at a particular place, and neither art nor violence could get it farther. He became by degrees unable to ſwallow any ſolid food, and in the end even liquids could not paſs: by this means he gradually waſted to a mere ſkeleton, and at length died famiſhed, his ſwallowing being totally obſtructed. Being opened by the ſurgeon, a polypus was found in his throat like thoſe which are uſually formed in the noſtrils, which filling up the whole paſſage of the gullet, ran down from the place of it's origin to the length of ſeveral inches: and many diſorders probably originate in the ſame way, though the cauſes of them may be overlooked.

From the gullet to the ſtomach, the paſſage is open and immediate; and thither the powder itſelf may accidentally be conveyed; but ſhould that not be the caſe, the liquid of the mouth, which is ſo eſſentially neceſſary to digeſtion, paſſes into the ſtomachs of thoſe who take a great deal of ſnuff, highly impregnated with the ſtupifying and acrimonious qualities of this powder of tobacco.

This the ſtomach having been accuſtomed to by degrees, and being brought ſtep by ſtep to endure it, even when very ſtrongly ſaturated, does not throw off by violent efforts of vomitting; which is the caſe, when a quantity of it falls by accident into the ſtomach not thus habituated; but it remains in that organ, mingles with the ſubjects of digeſtion, and the effects of it will, unqueſtionably, be perceived at ſome future period.

For a perfect and delicate ſtate both of the parts and juices are required to compleat properly the work of digeſtion: and, in this caſe, the inner coat of the ſtomach receives material injury by the continual application of this acrimonious ſubſtance; and the juices which ſhould operate in digeſtion, are materially altered for the worſe, being rendered acrid inſtead of mild; and from diſſolvents, acquiring a power of hardening, in a certain degree, what comes in their way: a circumſtance which may be proved by covering a piece of fleſh with an infuſion of tobacco-leaves in water, which will be found to poſſeſs in ſome meaſure the quality of the infuſion of oak bark, which is uſed by tanners to harden animal ſubſtance; or the red water which lies on bogs, and which alſo has ſome portion of the qualities of tan; hardening this animal ſubſtance, and rendering it tough inſtead of ſoftening, and by degrees diſſolving it, as would happen from common water. Bodies of perſons who have unhappily periſhed in bogs, have, after a great length of time, been taken up, neither ſoftened or corrupted, but entire and more firm than human fleſh in it's natural condition; the power of tan upon leather in hardening of it to a great degree is well known; and an infuſion of tobacco will produce the ſame effect.

And ſuch is, in ſome reſpects, the juice of the mouth, when it paſſes into the ſtomach, impregnated by tobacco. For though it may not be of ſtrength to harden animal ſubſtances, to the degree we have mentioned; yet in proportion to it's ſtrength, it operates in the ſame manner: and, the buſineſs of digeſtion being to ſoften and reduce the food which is ſwallowed to a kind of pulp, whatever in the leaſt tends to harden what ſhould be thus ſoftened, acts in direct oppoſition to digeſtion, and impedes that neceſſary operation.

Windy or flatulent complaints in the ſtomach, are the natural effects of indigeſtion; and on this principle, the moſt obſtinate and incurable flatulencies are occaſioned by ſnuff. Many of the diſeaſes to which mankind are ſubject originate in a bad digeſtion; and we truſt we have ſufficiently ſhewn that indulgence in the cuſtom of ſnuff, lays a foundation for the worſt diſorders; depraving and vitiating that juice, without which digeſtion cannot be performed.

But the advocates for tobacco have contended that it reduces corpulencies, and will take away unwholeſome and troubleſome fat; and though it is in ſome degree true, yet this is performed by ſpoiling the digeſtion; and therefore ſhould by no means be mentioned in praiſe of the herb, as it always leaves worſe complaints in the place of that which it may contribute to remove, of which the following inſtances may give ſufficient proof.

A gentleman of a good conſtitution, and fond of exerciſe, grew fat in ſpite of all endeavours to keep it down; in this condition he was adviſed by ſome officious friend to chew tobacco; and purſuing this advice, he certainly grew thin, and got rid of a drowſineſs which had hung upon him a conſiderable time, and ſeemed to threaten a lethargy; but the effect did not ſtop where he deſired, his digeſtion being enfeebled by the tobacco, his fleſh continued to waſte, he became ſubject to terrible bilious vomitings; and after being reduced to a perfect ſkeleton, died notwithſtanding the beſt medical aſſiſtance.

A perſon who was troubled with a conſtant burning in his ſtomach, and a ſtrange and continued tendency to vomit, apprehended his complaint aroſe from the gout, and was treated accordingly. He always awoke with a taſte of aſhes in his mouth; and was tormented with an intolerable heartburn: after which he grew ſickiſh, and unleſs he took ſomething immediately, vomited an acrimonious, thin, and yellow liquor. Upon conſulting a phyſician, he was of opinion the diſorder was not the gout, nor did there appear any thing in the patient's conſtitution that ſhould occaſion it: but, upon minute enquiry, it was diſcovered that he had about four months before got into a habit of taking ſnuff; this he was adviſed to leave off at once, and in conſequence, every troubleſome ſymptom vaniſhed; and perſiſting in renouncing ſnuff, he had no more gout in his ſtomach.

Even the continual yawning to which ſome people are ſubject to a very unpleaſing degree, is more than commonly troubleſome to thoſe who take ſnuff. Yawning is occaſioned by irritation, and it's ſeat is in the gullet; the inner coat of which being, as already deſcribed, extremely ſenſible, diſcharges the irritating ſubſtance in this way, as the membranes of the noſtrils bring on ſneezing from the ſame cauſe.

Frequent eructations, or belchings, though they may ariſe from other cauſes, and may affect thoſe who do not take ſnuff, yet are moſt common and moſt unconquerable in ſnuff-takers, ariſing in ſome inſtances evidently from that practice. Wind, bred by indigeſtion, is thrown out in this way by means of irritation: and the powder of tobacco is the cauſe of both. The liquor of the ſtomach, impregnated with it, becomes incapable of good digeſtion, and therefore wind is produced; and every pinch, as ſoon as the ſaliva in which it has been infuſed can get into the ſtomach, produces an irritation which throws that wind up. This is indeed a relief, but a moſt indelicate one; a much more certain method of obtaining eaſe is, by leaving off the cuſtom of ſnuff, which is the cauſe, and then the diſagreeable complaint will vaniſh, and the coarſe natural means of relief be avoided.

But theſe are only leſſer evils which ſnuff brings on in the ſtomach: the greater and more dangerous are, continual ſickneſs and vomitting. A man naturally of a robuſt and corpulent habit grew weak and emaciated without any apparent cauſe, and ſeemed haſtening toward his grave without being troubled with any particular diſorder. The phyſician who attended him was of opinion, that he was injured by taking vaſt quantities of ſnuff; but he had not influence enough to engage him to leave it off. He always vomitted in a morning, and after eating; and had ſuch an habitual coſtiveneſs, that nature ſeemed to have diſcontinued the uſual and neceſſary diſcharge by ſtool.

Finding, however, that all applications for ſuppoſed diſorders were ineffectual, he was at length prevailed on to leave off ſnuff entirely; and taking manna, diſſolved in water, and mixed with oil of almonds, by a ſpoonful at a time, nature reſumed her accuſtomed courſe, the vomittings ceaſed by degrees, and the ſtomach recovered ſtrength enough to perform it's uſual operations.

Happy, however, it is, that, as the miſerable conſequences of indulging in this cuſtom are plain, ſo the remedy is obvious; no medicine is neceſſary or uſeful to combat the effects of ſnuff; the only and certain cure is, to leave it off; this will produce a favourable effect at any time, and uſually even in the worſt caſes: and, if the parts are ſo far corroded and deſtroyed as not to be reſtored, the ravage will extend no farther when the cauſe ceaſes; and life may be preſerved, though probably at the expence of ſome delicate ſenſations.

But the moſt dreadful effect of ſnuff remains yet to be mentioned; this is the impreſſion it ſometimes makes upon the underſtanding. In ſome inſtances, it evidently dulls the apprehenſion; and, being long perſiſted in, reduces thoſe who are devoted to it to a ſtate of abſolute ſtupidity, a dulneſs of the faculties, and a kind of lethargy of the mind.

Such are the effects which ſome ingenious medical writers attribute to ſnuff; whilſt others contend, that it has a very contrary effect; that it aſſiſts, inſtead of impairing the imagination; and that the ſtudious, and public ſpeakers, find great aſſiſtance from it's immediate efficacy. To which latter opinion it is again objected, that the immediate effect of ſnuff in quickening the imagination, is like that of ſpirituous liquor in raiſing the ſpirits and promoting chearfulneſs: it is ſaid to be a falſe fire in both; which is moſt perceived by thoſe who are leaſt accuſtomed to the one and the other, and wears off as they become habitual; and that thoſe who are in the conſtant practice of taking ſnuff, feel no ſuch effect from it.

Perhaps thoſe who oppoſe ſnuff generally, are too ſevere in their remarks on the conſequences of taking it, and are in many caſes rather influenced by opinion, than convinced by facts, in ſupport of all the deleterious effects which they attribute to it; and it is probable, that thoſe who are advocates for the uſe of it, are themſelves devoted to it, and would be more inclined to conceal than promulgate any ill conſequences which they may themſelves perceive to be occaſioned by it. And, upon the whole, it is not impoſſible, but a ſmall quantity of this powder may be uſed without producing fatal effects; though we earneſtly adviſe our readers not to indulge in taking it to any conſiderable degree.

CHAP. VI.

Of Opium.

OPIUM is the milky juice which is extracted from the heads of poppies by inciſions made in them. This juice is gradually dried in the ſun to a proper conſiſtence. It is brought from Turky, Egypt, the Eaſt Indies, and other parts of Aſia; but botanical writers aſſert, that the opium we receive from all the places juſt named, is acquired by expreſſing the juice from the heads of the poppies.

This drug is brought into Europe in flat cakes, or irregular maſſes, each from four to ſixteen ounces in weight, covered with leaves, to prevent their ſticking together. It is a reſinous ſubſtance, ſoftiſh and tenacious, eſpecially when warm or much handled; of a dark reddiſh-brown colour in the maſs, and yellow when reduced to powder. It hath a faint, diſagreeable, ſtupifying ſmell, and a bitter taſte; if chewed a little, it affects the tongue with a ſenſe of heat, which ſpreads to the palate, and then in a leſs degree to the lips, and provokes a diſcharge of ſaliva. It heats the noſe, and ſo irritates it as to excite ſneezing.

The medical properties of opium are ſo numerous and valuable, that ſome have denominated it *manus Dei*, or, *the hand of God*. It's operation is generally accompanied with a ſlow, but ſtrong and full pulſe, a ſlight redneſs, heat, and itching in the ſkin, and ſucceeded by a low and languid pulſe,; it is alſo followed by low ſpirits, ſome difficulty of breathing, or a ſenſe of tightneſs about the breaſt, a ſlight giddineſs of the head, dryneſs of the mouth and entrances of the gullet, ſome degree of nauſea, heat, and pain in the ſtomach; but theſe ſymptoms are to be underſtood of a full doſe, taken when no particular diſeaſe requires it; for very large doſes are given in violent diſorders, without producing any diſagreeable effects.

In proper doſes, repeated at due intervals, it compoſes and relieves violent pains, ſpaſms, and convulſions; abates inflammation both internally and externally; moderates the heat in fevers, and aſſiſts other medicines in producing a more ſpeedy effect; it diſcuſſes ſtagnate fluids, whether applied externally or adminiſtered internally; it removes obſtructions ariſing from ſpaſms; abates extraordinary irritability, and removes thoſe convulſions which ariſe therefrom; it promotes the diſcharges through the ſkin, but retards the other evacuations; abates all kinds of pains, and totally removes ſome: in windy and flatulent complaints, it exceeds all of the aromatic tribe, for it's efficacy extends through the whole inteſtinal paſſage.

But notwithſtanding theſe undeniable excellent qualities of this drug, adminiſtered as a medicine, under proper cautions; an abuſe of it has of late years crept into this country, which deſerves our moſt ſerious notice and attention.

It is well known, that in thoſe countries of the eaſt, where the religion of Mahomet having prevailed, wine and all ſpirituous liquors are prohibited under ſevere denunciations of Divine wrath, the inhabitants are addicted to the uſe of opium, which occaſions temporary inebriation, and raiſes a kind of falſe ſpirit; which, however, ſoon flags, requiring frequent ſupplies of the ſame exhilarating drug, to prevent a depreſſion at leaſt equal to the unuſual and unnatural elevation.

Europeans, whoſe ſpirits are apt to fail from relaxation in the warmth of climates to which they are unaccuſtomed, have imprudently reſorted to this method of ſupporting them; and returning to the weſtern quarter of the world, have imported with them this pernicious cuſtom, which, we are ſorry to learn, has been imitated by thoſe who have not the ſame excuſe to offer, but who follow it upon principles which admit of no defence.

To diſſuade men from the indulgence of this deſtructive habit, the beſt argument that can be uſed will ariſe from the ſtate of the effects produced from immoderate quantities of this drug, with which, and the remedies, we ſhall conclude this chapter, remarking only, that large doſes and frequent repetitions are attended, with ſimilar conſequences, and that the latter will in the end prove equally dangerous and fatal with the former.

When imprudent doſes have been taken through miſtake, or with an ill-deſign, they are followed with immoderate mirth or ſtupidity, giddineſs, a redneſs of the face, ſwelling of the lips, troubleſome dreams, ſtarting, convulſions, cold ſweats, a conſiderable dilation of the pupil of the eye, imperfect ſpeech, ſlow full pulſe, quick breathing, nauſea, itching in the ſkin, vomitting, madneſs, hiccough, fainting, and the like violent and dangerous ſymptoms. Immediately on the happening of ſuch an accident, it is neceſſary to give a vomit of white vitriol, and repeat it four, five, or ſix times if the conſtitution is vigorous; after this, the patient ſhould be bled, and take frequently a ſpoonful of ſtrong vinegar; beſides theſe, ſharp cataplaſms may be applied to the feet, bliſters to the arms, clyſters of tobacco-ſmoke may be given, and frictions may be uſed, as the caſe ſeems to require: vinegar is the antidote, yet cordials ſhould ſometimes accompany it.

BOOK XIV.

The Britiſh Herbal.

INTRODUCTION.

IT was our firſt intention to have confined this *Herbal* to ſuch herbs and plants as are mentioned in the different preſcriptions contained in this work; but on full conſideration we are of opinion, that it will be uſeful to extend it to all ſuch of Britiſh growth, as are recommended for medical uſe by others.

For though an infinite number of theſe herbs and plants have been long ſince expunged from modern catalogues of ſuch as are appropriated to medicinal uſes; and though we do not ſcruple to confeſs ourſelves ſatisfied, that the vaſt variety of vegetable productions which were formerly employed in the different branches of the art of healing, compoſing ptiſans, diet-drinks, fomentations, embrocations, ſalves, ointments, cataplaſms, and ſinapiſms, are for the moſt part uſeleſs, and that the virtues of the greater part of them are comprized in a much narrower compaſs, and may be found in the different preparations of a very few drugs and minerals; yet as theſe latter are not always to be had, and the adminiſtration of them is not in all caſes ſafe, eſpecially when medical aſſiſtance cannot be procured; we have retained moſt of thoſe which are to be found in any modern preſcription.

And for the ſame reaſon we have added to the deſcription of each plant and herb, an account of the virtues attributed to it, and have pointed out the caſes in which it has been proved, from general report and opinion.

We have alſo ſubjoined proper directions for gathering and collecting herbs and flowers, together with their roots and ſeeds, both as to ſeaſons, and the ſtate of growth and advancement of each particular; and in which the different preparations of them either by diſtillation, or in ſyrups and conſerves, are beſt performed and effected.

Upon the whole, we truſt this part of our preſent work will not be found the leaſt valuable; many are the purpoſes to which the vegetable produce of Great Britain may be uſefully and advantageouſly employed: theſe we have endeavoured to inveſtigate in the cleareſt and moſt conciſe manner; and we can at leaſt aſſure our readers, that by attending to our directions they will incur no riſque of injury, and that if the uſe of theſe ſimples ſhould prove inefficacious, they will at leaſt be found to be innocent.

Adders Tongue.

THIS little plant is common in our meadows; and conſiſts of a ſingle leaf, with a little ſpike of ſeeds riſing from it's bottom, which, from it's ſuppoſed reſemblance to the tongue of an adder, gives the plant this name.

The leaf is oval in ſhape, and the colour a fine bright green; it is thick and fleſhy, and without ribs or veins. The ſtalk which ſupports it, riſes from a root compoſed of ſmall fibres, and is ſeldom more than four inches high. The ſpike reaches nearly the ſame height above it: and the tongue or ſeed-veſſel is notched on each ſide. The whole plant lies buried among the graſs, and muſt be ſought in April and May, dying off ſoon after that time, and being ſeen no more till the next ſpring.

It is a cooling herb; and an ointment is made from it which is ſaid to be uſeful for wounds and external inflammations. The leaves are to be chopped to pieces, and four pounds of them are to be put into three pounds of ſuet and one pint of oil, melted together. The whole is to be boiled till the herb is ſomewhat criſp, and then the ointment is to be ſtrained off; it will be of a beautiful green. Some give the juice of the plant, or the powder of the dried leaves inwardly, for internal wounds and bleedings; and an infuſion or decoction is ſaid to be uſeful for inflamed or watery eyes.

Agrimony.

THIS is a very common Engliſh plant: it flowers in the midſt of ſummer. It grows to a foot in height, but more or leſs according to the ſoil. The leaves are winged, hairy, of a pale-green, and notched at the edges, and the flowers yellow; the root is perennial, the ſtalk is ſingle, round, and ſtrong; the flowers ſtand in a long ſpike, and are ſmall but numerous; and the ſeed-veſſels by which they are ſucceeded are rough like furze. The plant is common at the ſides of hedges and near foot-paths; if the root is taken up in May, it has an agreeable odoriferous ſmell.

The leaves are uſed freſh or dry; they have been found by experience to be ſerviceable in the diabetes and incontinence of urine. The plant is alſo one of the celebrated vulnerary herbs, and an ingredient in the right Arquebuſade-water.

Black Alder.

THIS is a little ſhrub; the ſhoots of which are brittle, ſlender, and covered with a brown bark; the leaves are nearly round, but terminating in a point; they are of a bright green, and veined. The berries are large and black, they ripen in autumn; the flowers by which they are preceded, are ſmall and inconſiderable, of a whitiſh colour, and ſtanding on ſhort ſtalks.

This ſhrub is frequent in moiſt woods; and the berries ſo nearly reſemble thoſe of buckthorn, that they are ſometimes mixed among them by ſuch as gather them for ſale; but this may be attended with ill conſequences.

The only part of the *black alder* which is uſed in medicine, is the inner rind; this is yellow, and is a tolerable good purge; the beſt way to give it is in a decoction; to make which, a quart of it muſt be boiled in a quart of water, and at leaſt two drams of ginger and ſome carraway-ſeeds ſhould be thrown in during the boiling. The quantity of the doſe muſt be proportioned to the ſtrength of the patient: it is recommended in the jaundice. In the North of England, they bruiſe the bark with vinegar, and uſe it outwardly for the itch, which it is ſaid to cure with ſafety.

Ale-Hoof, or Ground-Ivy.

GROUND-IVY is a plant univerſally known; it creeps about hedges and flowers in ſpring. The ſtalks are hollow and ſquare, and ſometimes exceed a foot in length; the leaves are moſtly round and notched at the edges: in ſpring they are uſually of a purpliſh colour, which changes to green as the ſummer advances; the flowers are blue, the leaves ſtand two at each joint, and the roots are fibrous. The whole plant has a peculiar ſtrong, and not perfectly agreeable ſmell, it's virtues are at the height when it is in flower, and then it ſhould be gathered for uſe.

This herb is recommended as an excellent vulnerary, either outwardly or inwardly uſed; a conſerve may be made of it in ſpring; or it may be given by way of tea, or infuſed in new ale. It is ſaid to be uſeful in all diſorders of the breaſt and lungs, and in thoſe of the kidnies, and to be a remedy againſt bloody and foul urine.

Allheal, or Clowns Allheal.

THIS herb is found in wet grounds, in different parts of England, having long hairy leaves, and little flowers. It grows a foot and a half high, but the ſtalk is weak, ſquare and hairy: the leaves which are of a pale green, notched at the edges, and of a ſtrong ſmell, ſtand two at each joint, and in cluſters round the ſtalk at the joints; they reſemble thoſe of the dead nettle, but are ſmaller; the root is perennial and creeping.

This is ſaid to be a good herb for wounds, but it muſt be uſed freſh. The leaves are directed to be bruiſed and laid upon a new-made wound; and without any addition, are ſuppoſed to ſtop the bleeding and compleat the cure, which perhaps might be as well effected without the application as with it.

Almond Tree.

THE bitter and ſweet *almonds* differ in taſte, but the tree which produces them is the ſame; at leaſt it is only diſtinguiſhable by the taſte of the almond, the appearance of both being perfectly ſimilar. It grows to a moderate ſize, and has long narrow leaves, of a beautiful green, and notched at the edges; the bloſſoms are large, of a tender red colour, and extremely beautiful. The fruit is compoſed of three parts, a tough outſide covering, a ſtone within that, and in this ſhell the almond or kernel. Almond-teees grow frequently in gardens and plantations in England, but are chiefly cultivated in France and Italy.

Sweet almonds are admirable in emulſions, for ſtranguaries and all diſorders of the kidnies and bladder: for theſe purpoſes they ſhould be blanched and beat up with barley-water till the liquor is like milk; in ſmaller quantities, theſe emulſions may be given to perſons in conſumptions and hectic diſorders.

The bitter almond produces what is called oil of ſweet almonds, but the cakes left after preſſing afford by diſtillation a water that is as poiſonous as laurel water, and acts in the ſame way.

The Aloe Plant.

THOUGH this is a foreign plant, yet as a great many kinds of the *aloe* are preſerved in our green-houſes and ſtoves, it may not be improper to mention ſuch of them as are uſed in medicine, and theſe are only two, the ſuccotrine aloe-plant, and the common aloe.

The ſuccotrine aloe-plant is extremely beautiful; the leaves are like thoſe of the pine-apple, but grow to be eighteen or twenty inches long, prickly at the ſides, and armed at the extremity with a large thorn. The ſtalk is half a yard or more in height, naked at the bottom, but ornamented at the top with a large ſpike of flowers, of a longiſh ſhape, and hollow, and of a moſt beautiful red colour.

This plant affords the ſuccotrine or fineſt aloes; the leaves are preſſed gently, and the juice received in earthen veſſels: it is firſt ſet to ſettle, and afterwards dried in the ſun.

The common aloe is alſo a plant of great beauty; the leaves are larger than thoſe of the ſuccotrine-aloe, being ſometimes above two feet long, and an inch thick; they are indented at the edges and prickly, and like the other kind have a very ſharp thorn at the point. The ſtalk when it flowers riſes to a very great height, and is divided into ſeveral branches; the flowers are yellow, ſtriped with green.

The hepatic and caballine aloes are extracted from the leaves of this plant; the hepatic from the cleareſt and fineſt parts of the juice, the caballine from the coarſer ſediment.

The ſuccotrine aloe is the only kind that ſhould be given inwardly; and may be diſtinguiſhed from the others by not having the offenſive ſmell which is perceivable in the common ſort. It is a moſt excellent purge in many caſes, and has been preſcribed in a variety of forms, though, perhaps, the beſt way of giving it is in the tincture of hiera picra.

Common Amonum.

COMMON *Amonum*, which is more commonly called, *baſtard ſtone parſley*, is found about the hedges in different parts of England, and grows to three feet in height, but the ſtalk is ſlender, and divides into many branches. The leaves, which are of a bright-green, appear winged, but are really compoſed of double rows of ſmaller, with an odd one at the end. Some large and very beautiful leaves grow immediately from the root; thoſe on the ſtalks are ſmaller. The flowers are in little umbels or cluſters, at the extremity of every branch. They are ſmall and white. Each flower is ſucceeded by two ſeeds; and theſe are indented, ſmall, and of an aromatic taſte; the plant is diſtinguiſhed at ſight from all the others of the ſame kind, by the ſlenderneſs of it's ſtalk and branches, and the ſmallneſs of the umbels; but, above all, by the peculiar taſte of the ſeeds, which have a flavour of mace.

The root of this plant is ſaid to be good for diſeaſes of the urinary paſſages, and the ſeeds in diſorders of the ſtomach and bowels; and theſe alſo operate by urine. The quantity of a ſcruple, given in the colic, is ſaid in ſome caſes to prove an immediate cure; and it is a good ingredient in bitters.

Angelica.

THIS large and beautiful plant is both kept in our gardens, and found wild in ſome parts of the kingdom. It grows in rich ſoils, to eight feet in height, and the ſtalks are proportionably large, and divided into branches. The leaves are large and compoſed each of many ſmaller, ſet upon a divided foot-ſtalk; they are notched at the edges, and of a bright-green. The flowers are ſmall, but they ſtand in vaſt cluſters of a globular form. And each flower is ſucceeded by two ſeeds.

All parts of this plant are fragrant when they are bruiſed; and all parts of it are uſed in medicine. The root is long and large; that of our own growth may be uſed freſh; but fine fragrant dried roots are brought from Spain. The whole plant poſſeſſes the ſame virtues, being cordial and perſpirative; it has been long celebrated as an antidote againſt peſtilential and contagious diſeaſes. The root, the ſtalks candied, the ſeeds bruiſed, or the water diſtilled, may be uſed. The ſeeds are, however, the moſt powerful.

Apples of Love.

THESE large juicy fruits, are not produced on a tree, but on a ſmall low plant. The ſtalks of which are weak, and divided into many branches; the leaves are apparently large, but are really compoſed of many ſmaller ones ſet on a divided ſtalk; they are of a faint yellowiſh green colour. The flowers are ſmall, and of a bright yellow; the fruit is large in proportion to the ſize of the plant; and, when ripe, is of a red colour, and contains a ſoft juicy pulp and ſeeds.

The plant is a kind of nightſhade, but it is cultivated in gardens. The Italians eat the fruit as we do cucumbers. The juice is cooling; and is good, externally applied, for eruptions on the ſkin, and diſeaſes of the eyes, occaſioned by a ſharp humour.

Archangel.

THIS plant is commonly called *white dead-nettle*. It grows wild about our hedges, and in old farm-yards, under walls. It riſes to the height of a foot. The leaves are ſhaped like thoſe of the nettle, but are not offenſive to the touch. The ſtalk is ſquare, and the leaves hairy; the flowers are large in proportion to the ſize of the plant; they ſtand at the joints where the leaves are ſet on, in a regular and pleaſing form. The leaves ſtand in pairs, and the root creeps under the ſurface of the ground, and ſpreads aſtoniſhingly.

The only part uſed medicinally are the flowers, which muſt be gathered in May, and made into a conſerve; for this purpoſe, a pound of them may be beat up with two pounds and a half of ſugar: they may alſo be dried. They are preſcribed in female weakneſſes, and other diſcharges of the like kind.

Red Dead Nettle.

THIS little plant is alſo called *red archangel*. It is common under hedges, and as a weed in gardens; the ſtalks are ſquare, and weak, and the leaves ſhort and notched at the edges; the flowers which are of a red colour, grow among the leaves near the top of the plant, which is not above four or five inches high. They are ſhaped like thoſe of the white archangel, but are ſmaller.

The leaves and flowers of this plant are uſed freſh or dried. The decoction is recommended for floodings, bleeding at the noſe, ſpitting of blood, and other hæmorrhages; and to ſtop blood, bruiſed and applied externally.

Arrach, or Stinking Arrach.

THIS plant grows wild about farm-yards, and in other undiſturbed grounds. The ſtalks are ſometimes a foot long, but ſo weak, that they ſeldom ſtand upright; they are of a pale-green colour. The leaves do not exceed the ſize of a ſhilling, are round, and have a bluiſh caſt. The flowers make no extraordinary appearance; and the ſeeds are ſmall, ſtanding in cluſters at the tops of the branches, and are of a greeniſh white. The plant is diſtinguiſhable by being covered with a ſort of moiſt duſt in large particles, and by it's ſmell, which is extremely diſagreeable. It muſt be uſed when it is freſh, loſing it's virtues in drying. A ſyrup may be made of a pint of it's juice and two pounds of ſugar, which will keep a year.

A conſerve may alſo be made of the leaves and three times their weight of ſugar. It is ſaid to be a ſerviceable medicine in hyſteric complaints and epileptic fits, and to promote female diſcharges, as well thoſe which are periodical, as thoſe which follow child-birth.

There is another kind of *arrach*, which is uſually called *garden-arrach*: this is an annual, raiſed from ſeed, and ſometimes uſed in the kitchen. It grows to the height of a yard, and the leaves are broad; thoſe which riſe immediately from the root have a little leaf on each ſide their baſes. The ſame wet duſt is perceivable on this as on the other kind. Theſe leaves have a cooling and ſoftening quality; and the ſame virtues are attributed to them, as to thoſe of the wild ſort, but they are leſs powerful.

Aron.

THIS plant, which is vulgarly called *cuckow-pint*, and *lord and lady*, is very common about the ſides of the hedges. The root is in ſize and ſhape like a walnut, being brown on the outſide and white within; and this, as well as the leaves and ſtalks, is of a ſharp acrid taſte; the root lies deep, the leaves are large, and in ſhape like the bearded head of an arrow, of a ſtrong green colour, but ſometimes ſpotted; among theſe leaves riſe thick ſtalks, ſupporting a very ſingular kind of flower, which is long, thick, fleſhy, and of a red or white colour, and the whole ſurrounded with a green ſkin or caſe; afterwards this caſe, and external parts of the flower falling off, the ſtem only remains, ſupporting a quantity of berries. The flowers open in April and May, and the berries ripen in Auguſt and September, when they are of a fine red colour.

The part uſed in medicine is principally the root, which is given as a remedy in palſies; half of one of the roots, freſh gathered and bruiſed, is ſaid in ſome caſes to have reſtored the ſpeech at once; and the continued uſe of them to have compleated the cure. It is alſo recommended in ſcorbutic caſes, and external obſtructions; it is ſome times dried and powdered, but loſes it's virtue in this preparation.

Arſmart, or Water-Pepper.

THIS plant grows every where about rivers, ditches, and watery places. It riſes to the height of eighteen or twenty inches; the ſtalks are weak, of a green or reddiſh colour, and jointed. The leaves are long and narrow, reſembling thoſe of the peach-tree, and are of a bright green without ſpots, and even at the edges. The flowers ſtand at the tops of the ſtalks in ſlender ſpikes, and are of a whitiſh colour, inclinable to green: there are ſeveral other kinds of *arſmart*, and as they differ from this in nature and qualities, proper care ſhould be taken to gather the right, which may be particularly diſtinguiſhed by having no ſpot upon the middle of the leaf, which is found in the common kind of arſmart; and this has alſo thicker ſtalks, and ſpikes of red flowers, and is deſtitute of the virtues aſcribed to the other ſort, which is ſaid to be an excellent medicine in retenſion of urine, in the gravel and ſtone, in the jaundice, and in the early ſtages of dropſies: the juice expreſſed from the leaves and ſtalks of the freſh-gathered plant is the beſt preparation of it; it was formerly uſed outwardly to cleanſe old ulcers.

Artichoke.

THIS plant is of the thiſtle kind; and it's head, which is brought to our table, owes much of it's bigneſs and fleſhineſs to cultivation. The leaves are large, divided into many parts, and ſometimes they are prickly; the ſtem is ſtout and ribbed, and the head is formed of large ſcales; the flowers reſemble thoſe of the thiſtle, and the ſeeds are winged with down like thoſe of the laſt-mentioned plant.

The freſh root, ſliced and boiled in water, in the proportion of eight ounces of the former to five half pints of the latter, makes a decoction which operates by urine, and is ſaid to cure the jaundice.

Aſarabaca.

THIS plant, though found wild in many parts of Europe, is only to be met with in our gardens. It is ſmall and low, and the roots creep about the ſurface of the ground; the leaves grow ſingly from the roots, and the plant is without ſtem or ſtalk, but each leaf has it's ſeparate footſtalk, three or four inches long; and the leaf itſelf is round, fleſhy, and of a dark green colour; the flowers are extremely ſmall, of a duſky colour, and grow near the ground.

The part eſteemed in medicine, is the root; the juice of which is given in ſmall doſes; it is dried and given in powder or infuſion. It operates powerfully by urine, and is recommended in obſtructions of female periodical diſcharges, in the jaundice, and dropſy.

The Aſh.

THIS is one of the Engliſh timber trees, and univerſally known; the bark of the branches is grey, and the leaves winged; the ſmaller ones of which they are compoſed are oblong and indented. The flowers are of a whitiſh green, and appear before the leaves. The ſeeds are commonly called *aſh-keys*, and ripen in September.

The bark of the young branches is recommended in obſtructions of the inteſtines, particularly of the liver and ſpleen, and therefore may be uſeful in dropſies, jaundice, and other complaints which originate in thoſe parts. It acts diuretically, and the ſame virtue is aſcribed to the ſeeds, but they do not ſeem to be equally efficacious.

Aſparagus.

OF this plant the root is uſeful in medicine, and the early ſhoots are eaten and highly eſteemed at the table. It poſſeſſes virtues not unlike thoſe of the artichoke, but in a much more eminent degree.

The *aſparagus* is ſaid to grow in ſome parts of England, and particularly in Cornwall, about the Lizard Point, and other places on the ſea coaſts; and it's root in this wild ſtate, is better than that of the cultivated plant, but it's ſhoots are leſs eſteemed. The plant grows to the height of three feet, and very much branched; the leaves are fine, and of a pale green; the flowers are ſmall and greeniſh; but the berries which ſucceed them, are as big as peas, perfectly round, and beautifully red.

The root is adviſed as a diuretic, and as a remedy in all obſtructions of the internal parts, and in ſuch diſorders as are occaſioned by them, ſuch as jaundices and dropſies. The method of adminiſtering it is in decoction.

Avens.

THIS common wild plant grows about hedges, and other undiſturbed grounds, and riſes to the height of a foot or more, but ſeldom exceeds fourteen inches; the ſtalk is firm and ſlender, and is divided into various branches; the leaves are large and rough, and the ſtalk hairy; the leaves that grow from the root are winged, conſiſting each of three pair of ſmall ones, with a much larger at the end; thoſe on the ſtalk are of a leſs ſize, and conſiſt of fewer parts; but in other reſpects they are ſimilar; the flowers are ſmall and yellow; and are ſucceeded by rough heads, as big as a horſe-bean, containing many ſeeds with hooked filaments. The root is long and large, of a firm ſubſtance, red colour, and fragrant aromatic ſmell, to which many ſpicy drugs are inferior.

It is ſaid to be cordial and perſpirative, and equally ſerviceable in nervous complaints and intermittent fevers, even when the bark has been unſucceſsful.

Balm.

THIS plant is ſo common in our gardens, as to need little deſcription. It grows to the height of eighteen inches or two feet; and the ſtalks are ſtrong, ſquare, and hairy. The leaves are oblong, broad, pointed at the ends, and notched about the edges; they ſtand two at each joint; the flowers, which appear in July, are ſmall and white, but have large rough tops, which remain after the leaves which compoſe them are fallen. They ſtand in circular cluſters round the ſtalk at the upper joints; the whole plant ſmells fragrantly. The root creeps and ſpreads exceedingly in a good ſoil, and ſomewhat ſhady ſituation.

Balm is much better freſh than dry, for it loſes it's fragrancy in drying. The tea is an excellent diluting liquor, and may be drank to promote perſpiration, and quench thirſts in fevers; it is alſo good for diſorders in the head and ſtomach.

The Barberry Buſh.

THIS ſhrub grows wild in ſome parts of England, and is common every where in gardens; it grows ſometimes eight or ten feet high in an irregular manner, and much branched. The external bark is whitiſh, and the branches are defended by a number of prickles. The leaves are of an oval figure, and of a ſtrong green colour, and are indented about the edges. The flowers are ſmall and of a pale yellow; the fruit is well known, being preſerved in pickle, and ſent to table, both as an ornament and for uſe. The berries are oblong, red, and of a ſour taſte. The branches are brittle, and under the pale outer rind there is another of a bright yellow and much thicker. This part is uſed in medicine; and is ſtrongly recommended for the jaundice, in the removal of which diſorder it has been often known to prove ſucceſsful. It is alſo ſaid to be good in all obſtructions. The beſt way to give it is in an infuſion made with boiling water.

Barley.

BARLEY is not only uſed in medicine, but, in ſome diſtant parts of England, bread is compoſed of it; and the uſes made of it in the brewery and diſtillery are perfectly well known. It is eaſily diſtinguiſhed from wheat as it grows, being leſs tall, and the leaves ſmaller and narrower. A long beard grows from each grain in the ear, which is compoſed of two rows of the grains.

This grain is uſed in two forms, the one called *French barley*, and the other *pearl barley*. The French barley is ſkinned, and the ends ground off; the pearl barley is reduced by mere grinding to a little round white lump. The pearl barley makes the finer and more elegant barley-water, but that made from the French barley is to be preferred. It is given to allay the heat of urine, and in all caſes of gravel and ſtone; and is allowed to be a ſalutary liquor in moſt acute diſeaſes where it is neceſſary to dilute. It is alſo in ſome degree nouriſhing.

Barren Wort.

THIS is a very pretty plant, of ſingular growth and appearance; it is a native of England, but not common. It grows in woods and unfrequented places, and has beautiful purple and yellow flowers; it grows a foot high; the leaves are oval and ſhaped like a heart, deeply indented at the edges, and of a duſky green; the ſtalks which produce the flowers, are weak, brittle, and uſually crooked; the flowers ſtand in a kind of very looſe ſpike, ten or a dozen upon the top; they are ſmall, but very diſtinct and conſpicuous; the backs of them are purple with a red edge, and the middle is yellow; the root is fibrous and creeping.

Old writers were of opinion that this plant produced no flowers; but this idea is eaſy accounted for: when it ſtands expoſed to the ſun, it ſeldom blows, as may be obſerved in gardens where it is planted in ſuch ſituations, and where it will ſtand many years without flowering; but the damp and dark woods of this country favour it. Ancient botaniſts ſaw it in warm climates and an unfavourable expoſure; and from this circumſtance, as well as from it's ſuppoſed virtues, the name is derived.

In the north of England the common people give milk, in which the roots have been boiled, to the females of the domeſtic animals, when they are running after the males, and imagine it has the certain effect of ſuppreſſing the natural emotions; and from hence they have been taught to give it to young women of robuſt habits, who are ſubject to violent hyſteric complaints, and it is ſaid with great ſucceſs; they give the decoction of the root ſtrong and ſweetened: ſtrange as the circumſtance appears from whence it draws it's medical reputation, it has been aſſerted to have ſucceeded in caſes which have baffled the ſkill of the phyſician. It is ſaid that if too large a quantity be given, it renders the patient ſtupid for ſome hours; but that no ill conſequences have attended this ſymptom; however, we are of opinion that it ſhould be adminiſtered with great caution, as it apparently chills the blood and impedes the circulation.

The Bay Tree.

THOUGH the *bay tree* is a native of Spain and Italy, where it grows to a large tree; yet it is now common in all the gardens and plantations of England, where it riſes to a very conſiderable height and magnitude, though not ſo large as to render the wood uſeful. The wood is not ſtrong, but ſpongy and filthy, and the leaves are evergreen; the bark of the large branches is of a duſky brown, and that of the ſmaller reddiſh; the leaves are long and ſomewhat broad, pointed at the end, and extremely fragrant; the flowers are very ſmall, but highly odoriferous; their colour is whitiſh, they appear in May, but are ſeldom noticed; the berries ripen towards the latter end of autumn, and are large and black, conſiſting of two parts within one ſkin.

The dried berries are the part of the tree moſtly uſed; but the leaves alſo have great virtue. The berries are given in powder or infuſion; in caſes ariſing from obſtructions, and in colics; they promote the diſcharge of urine, and the evacuation after child-birth; the leaves are given as a cordial in nervous complaints; and thoſe who are afflicted with palſies are recommended to take ſmall dozes of them often repeated; four or five moderate doſes have been known to cure agues; they are to be put into an oven as ſoon as they are gathered, and when they are criſp reduced to powder.

Baſil.

THIS ſmall herb is a native of warmer countries, but is now common in the gardens of England; it is buſhy and branched, the ſtalks ſquare, and the leaves, which are broad and ſhort, and ſomewhat indented at the edge, ſtand two at each joint; the flowers are ſmall and white, and ſhaped like thoſe of the dead nettle; they ſtand on the upper part of the branches on looſe ſpikes. The whole plant is very agreeably ſcented.

Baſil is little uſed, though it is ſaid to poſſeſs many medicinal virtues; tea made of the green plant, is preſcribed as an antidote and remedy againſt all obſtructions; and ſome aſſert, that no ſimple is more effectual for gently promoting the female periodical diſcharges, and for removing thoſe complaints which are the natural conſequences of their ſtoppage.

There are two or three other kinds of baſil, but this which we have deſcribed is the only one uſed in medicine.

The Bean.

THE common *garden* and *field bean,* is known to our readers of all ranks; it ſometimes reaches to a yard or more in height; the ſtalks are angular, and the leaves are winged and ſtand one on each joint; the flowers are white ſpotted with black, and afford a delicious ſcent. It is unneceſſary to deſcribe the pods and ſeeds.

Water has been formerly diſtilled from bean-flowers, and uſed to ſoften the ſkin, but common diſtilled water does as well; yet a water may be drawn from the bean-pods by bruiſing them when the beans are half ripe in them, and diſtilling them with water in a common alembic, which is a very gentle carminative without any heat or acrimony, and is ſaid to be uſeful for children's gripes.

Bear's Foot.

THIS is a low and ſingular plant, but not deſtitute of beauty; it is a native of ſeveral parts of Europe, but is only preſerved in our gardens; the leaves are large, each riſing from the root ſingly, on a foot-ſtalk about ſix inches long, and divided into ſeveral parts like fingers on a hand; theſe diviſions are ſometimes more and ſometimes leſs in number; the flowers are very beautiful, being nearly as large as a common ſingle roſe; they are white, reddiſh, or greeniſh, according to the time they have been open, and ſtand each on a ſingle ſtalk, which riſes from the root and is without leaves. It flowers in January.

The root is given as a purge, and is ſaid to work briſkly; it deſtroys worms, and is good in dropſies, jaundice, and other diſeaſes occaſioned by obſtructions, and has been even recommended in madneſs; but it is neceſſary to be extremely careful that it is genuine, for that of the green flowered wild or baſtard helebore, is commonly ſold in it's place, which is a very rough and ſomewhat dangerous medicine.

Lady's Bedſtraw.

THIS wild plant is frequently found about hedges in the month of June, and the ſucceeding months; the ſtalk is weak and near two feet in height; the leaves are of a dark green and ſmall, and the flowers are yellow; the ſtalk is angular and whitiſh, very brittle, and ſeldom grows ſtraight; ſeveral leaves ſtand at each joint, which are ſmall, narrow, and diſpoſed about the ſtalk in a regular form like the rowels of a ſpur; the flowers grow in large tufts on the tops of the ſtalks, and they make together a very conſpicuous appearance, though ſingly they are ſmall.

This herb, though little regarded, is ſaid to poſſeſs very great virtue; it ſhould be gathered before the flowers are quite blown, and dried in the ſhade; an infuſion of it is preſcribed to ſtop the moſt violent bleedings at the noſe, and almoſt all other hæmorrhages.

Beet.

THIS plant is common in every garden, and eaten at our tables; there are two ſorts, the white and the red; the former, which is the medicinal kind, grows to the height of three or four feet. The ſtalk is large and ſtrong, the leaves broad and waved at the edges, the flowers of a greeniſh white colour, and but little obſervable; the root is large and long.

The juice of the freſh root is recommended as a remedy for the head-ache and tooth-ache, when it is occaſioned by a cold, and the whole jaw is affected; it is directed to be ſnuffed up the noſe, to promote ſneezing.

The *red beet-root* may probably anſwer the ſame purpoſes, but it is not ſo ſtrong as the white.

White Behen.

THIS plant grows wild in the corn-fields, and is ſometimes two feet high; the ſtalks are weak, and of courſe crooked; but they are ſubſtantial enough, round, and of a greeniſh white colour; the leaves are oblong, broad, and of a fine blue green; they are not indented at all at the edges, and grow two at every joint; the joints of the ſtalk at the parts where the leaves are ſet on, are ſwelled and large, and the leaves have no ſtems; the flowers are white, of a moderate ſize and prickly; they ſtand upon a huſk which ſeems to be blown up with wind.

Many virtues are attributed to this plant, and particularly in nervous caſes; the root, which is long, white, and woody, is to be gathered before the ſtalks riſe, and being dried, an infuſion is to be made from it, which though it may not be powerful enough to remove a preſent violent diſorder, is ſaid to be an excellent preſervative taken cautiouſly.

Bed Behen.

THIS plant grows wild about our ſea-coaſts, and is extremely pretty; it riſes to a foot in height; the ſtalks are naked, and the flowers red; and, in their diſpoſition, ſomewhat reſemble lavender; about the foot of the ſtalk ſtand cluſters of large and broad leaves which are round at the ends thick, in ſubſtance, and the colour a deep green; theſe riſe immediately from the root; and the ſtalks, which are of a pale green, and very tough and ſtrong, and branched, grow up among the leaves: the root is long and reddiſh.

In ſome parts of England, the people cure themſelves of purgings, and of overflowings of the female diſcharges, with an infuſion of this root, and eſteem it a very valuable medicine: it is to be gathered as ſoon as the young leaves appear, and being well cleaned, muſt be hung up to dry; it may be taken in powder, half a dram for a doſe.

Wood Betony.

THIS herb, which poſſeſſes many virtues, is frequent on the ſides of woods and among buſhes and low ſhrubs, in the month of June; the ſtalks grow a foot high, and are almoſt naked, and the flowers are of a purple colour; many leaves riſe from the root, which have long ſtalks, are broad and ſomewhat above an inch long, of a very dark green colour and hairy, blunt at the points, and indented at the edges; the ſtalks are ſquare, of nearly the ſame colour, hairy and not very ſtrong; they bear very few leaves, and thoſe diſtant from each other; but they ſtand two at a joint, and are like thoſe which ſpring from the root; the flowers ſtand at the tops of the ſtalks in a kind of thick ſhort ſpike; they are ſmall, of a purple colour, and ſhaped like the flowers of mint.

Betony ſhould be gathered as it is ready to flower; it is eſteemed ſerviceable in diſorders of the head and all nervous complaints; and many old writers have aſſerted that the habitual uſe of it will cure the moſt inveterate head-aches; it is beſt taken as tea when it is green, or in powder when the leaves are dried; ſome mix it with tobacco and ſmoke it, but this is a more uncertain method: the number of virtues attributed to it by the ancients, would fill a book; indeed, it is ſaid to have been the ſubject of volumes.

There is another taller plant, with ſmall purple flowers, ſomewhat reſembling thoſe we have deſcribed, which grows by waters and in damp places; from whence, and the ſhape of the leaves, it is called *water betony*; but it does not poſſeſs any of the virtues of this plant; the laſt mentioned is a kind of figwort, and the virtues come neareſt to thoſe of that plant, though in an inferior degree.

The Bilberry Buſh.

THIS plant is alſo called *bleaberry-buſh*, and in the weſt of England the *whortleberry*; it is common in boggy woods, and upon wet or moiſt heaths; the ſtalks are tough, angular, and green; the leaves ſmall and ſomewhat reſembling thoſe of the myrtle, being broad and ſhort, but theſe are indented about the edges; the flowers are ſmall, but very pretty; their colour is a faint red, and they are hollow like a cup: the berries are about the ſize of a large pea; they are of a black or of a very deep red, when they are ripe, and are of a very agreeable taſte.

A ſyrup made of the juice of bilberries, when they are not too ripe, is cooling and binding, and is recommended as a pleaſant and gentle medicine for women whoſe diſcharges are apt to be too redundant, to abate which it ſhould be taken a week before the expected periodical return; this ſyrup is alſo ſaid to be of uſe to ſtop vomitting, and reſtrain a bilious looſeneſs.

The Beech Tree.

THIS tree, which grows to a very conſiderable ſize, affording a light timber, very uſeful for a great variety of domeſtic and other purpoſes, is too univerſally known to require any particular deſcription.

The medical purpoſes to which this tree has been applied are but few; the leaves are ſaid to be cooling and binding, and have been uſed externally to diſperſe hot ſwellings; and the water which is found in any accidental hollows of theſe trees, is recommended to cleanſe the ſkin from ſcurf, tetters, and other eruptions.

Bind Weed,

IS a common wild plant climbing about our hedges, and laying hold of fences, ſticks, and almoſt every tall growing plant; it bears very large white flowers; the ſtalks are too weak and ſlender to ſupport themſelves, but they are very tough, and run to the length of ſix or eight feet, or even more; the leaves of this plant are large, ſhaped like the head of an arrow, and ſharp towards the point: theſe leaves do not ſtand in pairs, but ſingly, and are of a pale green colour; the flowers are as broad as a crown-piece at the mouth, but grow narrower at the baſes, being bell-faſhioned, and perfectly white; the root is long and ſlender.

In ſome counties of England, the common people uſe the root of this plant as a purge; for this purpoſe they gather it freſh, and boil it in ale to ſave the expence of drugs; it is extremely nauſeous, and would by no means ſuit a delicate ſtomach; but for perſons of ſtrong conſtitutions, it is ſaid to be a briſk and ſafe purge, though the quality is by no means generally known, notwithſtanding the plant is one of the moſt common weeds which infeſts the gardens and fields.

The Birch Tree.

THIS tree is common in the woods and hedges of England, but does not reach the ſize of the beech; the external bark is ſmooth and white; the young ſhoots are reddiſh, ſmall, and long; the leaves are very beautiful, being ſhort, roundiſh, of a fine bright green, and notched at the edges; the flowers are ſeldom noticed, and the fruit is a little ſcaly globule preceding the leaves in ſpring.

The juice of the *birch tree*, which may be procured by boring a hole in it in the ſpring, acts diuretically, and is ſaid to be good againſt the ſcurvy; the leaves, freſh gathered and boiled in water, afford a decoction which operates in the ſame manner, though much leſs powerfully, and is preſcribed in dropſies; it may alſo be uſed outwardly for all diſorders of the ſkin.

Biſtort.

THIS is a moſt beautiful wild plant which grows in the meadows in various parts of England; and, when in flower in May and June, makes a very conſpicuous, as well as very elegant appearance; it grows about a foot and a half high; the leaves are broad and beautiful, and the flowers form a thick ſpike or ear at the top of the ſtalks, and are of a bright red colour; immediately from the root riſe a number of large and beautiful leaves, long, broad, and of a fine green colour; the ſtalks on which theſe leaves ſtand, have alſo a rim of the leaf running down them; the ſtalks themſelves are round, firm, and erect, of a pale green, and have two or three leaves like thoſe which ſpring from the roots but ſmaller, placed at diſtances; the ſpike of flowers is as long and as thick as a man's thumb; the root is thick and contorted, of a blackiſh appearance on the outſide, and red within.

The root of the *biſtort* is recommended by ſome botanical and medical writers, as one of the beſt aſtringents in the world, acting with certainty, but not with violence; the time of gathering it is in March, juſt as the leaves begin to ſhoot. A number of them may be ſtrung on a line, and dried in the ſhade. The powder or decoction of them is ſaid to ſtop fluxes of the belly, and to be one of the ſafeſt remedies known for overflowings of the female periodical diſcharges. Theſe roots are alſo adviſed as a remedy for a diabetes; and they are ſaid to be ſo perfectly innocent, that the uſe of them may be purſued for a conſiderable time without danger; ſo that if they ſhould prove inefficacious, they will not be injurious.

Bitter Sweet.

THE ſtalks of this common wild plant are weak though woody; for which reaſon it creeps among hedges; it bears branches of pretty flowers in ſummer, and theſe are ſucceeded by berries which ripen and turn red in the fall of the year; as the ſtalks are ſupported by other plants, they ſometimes run to ten feet in length; they are of a bluiſh colour, and ſmell very diſagreeably, and like rotten eggs, when they are bruiſed or broken; the leaves are oval, ſharp at the points, and have each two ſmaller ones near the baſe; all the leaves are of a duſky green, indented at the edges, and growing ſingly on the ſtalks; the flowers are ſmall, and of a fine purpliſh blue, with yellow threads in the middle; the berries are of an oblong ſhape. This herb is little regarded in medicine, though it is ſaid not to be without virtues. The nightſhades are accounted poiſonous, and many of them are ſo; but this is by no means noxious. The wood of the larger branches, and the young ſhoots of the leaves, are recommended as a ſafe and excellent purge; and dropſies, in the early ſtages, are reported to have been cured by this ſingle medicine.

Blood Wort.

THIS plant is of the dock kind, and is uſually kept in gardens, though in ſome places it is found wild; it grows four feet high; the ſtalks are firm, ſtraight, and ſubſtantial, breaking into different parts, and fluted; the leaves very long, broad at the baſe, and growing narrow towards the extremity; ſome but not all are indented at the edges; they ſtand upon long footſtalks, and are of a deep green colour; but they are in different degrees, ſome more and ſome leſs, ſtained with a beautiful blood red; ſometimes only the ribs have the appearance, and at others there are long veins of red ſpreading in an irregular manner over the whole leaf; and theſe veins or ſtreaks, are in ſome leaves very broad, and in particular inſtances, the whole leaves and ſtalks alſo are of the ſame blood colour; the flowers are very numerous, and of a ſmall ſize, reſembling in all reſpects thoſe of the common wild docks; the root is like thoſe alſo, long and thick, but of a deep red colour.

Of this plant, the roots are only uſed in medicine; they are beſt dried; and a decoction may then be made from them, or they may be given in powder: they are reputed to act powerfully as an aſtringent to ſtop bloody fluxes, the ſpitting of blood, and the overflowing of the female periodical diſcharges. This root is alſo recommended as a remedy for violent purgings, and for the whites in women.

Bramble.

OF all the plants of the fields and hedges, this is the moſt common, as it is found in every part of the kingdom; the ſtalks are woody, angular, and of a purpliſh colour, whilſt they are young, but of a dark brown as they grow older; they are armed with crooked thorns, of ſize and ſtrength proportioned to the age of the ſhoot on which they grow; the leaves are rough, indented, and ſtand either five or three on a ſtalk; the flowers are white, with a very faint tinge of purple at their firſt opening; and the fruit is compoſed of a number of ſmall grains, which firſt turn red, and when they are perfectly ripe, black.

Little as this very common plant is regarded, it has it's uſes in medicine: the buds of the *bramble-leaves*, boiled in ſpring water, and the decoction ſweetened with honey, are preſcribed with ſucceſs for ſore throats; the juice of the unripe fruit made into a ſyrup, with very fine ſugar, is cooling and aſtringent, and is recommended in immoderate fluxes of the female diſcharges, and even in violent looſeneſſes; but when the berries are to be uſed for this purpoſe, they are to be gathered whilſt they are red.

Blue Bottle.

THIS plant is alſo univerſally known, growing generally among corn: the leaves are narrow, and of a whitiſh green; the flowers of a very beautiful blue, and rather large. This plant ſeldom grows much above a foot high, and when there are many of them in a field, they make an elegant appearance in flower; the root is hard and ſomewhat fibrous; the ſtalk is ſtrong, white, angular, and branched or divided; thoſe leaves which grow from the root are notched at the edges, but not thoſe on the ſtalks, but both are narrow like blades of graſs; the flowers ſtand only on the tops of the branches, and grow out of a ſcaly head; the ſeeds are beautiful, being hard, of a white colour, and ſhining as if they were poliſhed.

Different parts of this plant may be uſed medicinally.

Thoſe leaves which grow on the ſtalks, freſh gathered and bruiſed, are ſaid to be ſo efficacious in ſtopping the bleeding of freſh wounds, that even if a large veſſel be cut, they will effectually anſwer this purpoſe; and may even ſave a life in caſe of ſuch accidents, where a ſurgeon is not to be had in time: a diſtilled water of the flowers was formerly kept in the ſhops, but it was good for nothing; an infuſion of theſe is ſaid to be diuretic.

A larger kind of this plant is preſerved in gardens, and this has been eſteemed a vulnerary or wound herb, but does not appear to poſſeſs the virtues of the wild ſort.

The Box Tree.

THIS ſhrub is a native of Great Britain; a ſpot in the county of Surry, not much above twenty miles from London, deriving it's name from it; it ſometimes grows to a height and ſize above moſt other ſhrubs, but is generally kept low in gardens, where it uſually ſerves to border parterres; the bark is of a very light aſh colour, nearly white; the wood of a faint yellow; the leaves ſmall, round, ſmooth, of a very dark green colour, and extremely numerous; the flowers are very inconſiderable, and of a greeniſh yellow; the fruit is ſmall and round, but has three angular points.

The wood of the *box-tree*, and particularly that of the root, is ſaid to poſſeſs the ſame virtues as the guaiacum, but in a greater degree, and is preſcribed to perſons whoſe blood is foul; it may be adminiſtered in decoction, which ſhould not however be made too ſtrong, but ought to be continued a long time; inſtances have been known where leproſies and ſimilar diſorders of the ſkin have been entirely cured by this medicine; an oil extracted from it by diſtillation, is good for the tooth-ache, dropped on cotton, and put into the tooth.

Borage.

THIS is a rough plant very common in gardens, having large leaves, and handſome blue flowers; it grows to the height of two feet; the ſtalks are thick, full of juice, round, fleſhy, and covered thickly with a kind of hairs, each of which is ſo ſtrong as to act like a prickle; the leaves, which are oblong, broad, and ſomewhat wrinkled, have nearly the ſame ſort of hairs, but theſe are leſs than thoſe of the ſtalk; the leaves which grow from the root are the largeſt, but thoſe on the ſtalks are of nearly the ſame ſhape; the flowers riſe from the tops of the branches; each of theſe is divided into five parts, of a moſt beautiful blue, with a black ſpot or eye in the middle.

This plant is reputed to poſſeſs cordial qualities; but they are to be obtained only by a light cold infuſion, which is the reaſon that it is commonly thrown into cold negus or wine and water, to compoſe a ſummer drink; in all medicinal preparations it is nauſeous and of little uſe.

White Briony.

THIS wild plant grows extremely tall, and climbs about our hedges, which in many places it almoſt covers; the leaves reſemble in ſome meaſure thoſe of the vine; the flowers are ſcarce worth notice, but they are ſucceeded by red berries, which make a pleaſing appearance; the root grows to a large ſize, and is rough and whitiſh; the ſtalks are ſlender but tough, grow to ten or twelve feet in length, but are weak and unable to ſupport themſelves; at each joint they have tendrils, which lay hold on any tree or buſh; the leaves are broad, and have deep diviſions at the edges, and are hairy; the berries are of a moderate ſize, and full of ſeeds.

The part uſed in medicine is principally the root, the juice of which operates ſtrongly both by vomit and ſtool, and that when taken in ſuch ſmall doſes, that it ſhould be adminiſtered with great caution,

tion, and eſpecially to perſons of weak conſtitutions; but for thoſe that can bear it, it is ſaid to be excellent in many ſevere diſeaſes, and in particular dropſies; it is alſo preſcribed againſt hyſteric complaints, but for this purpoſe, the doſes muſt be ſo ſmall as to produce little or no ſenſible effect, and theſe ſhould be frequently repeated.

Black Briony.

THE virtues of this plant are little known or heard of, though it is ſaid to poſſeſs many; it climbs upon buſhes and hedges like that laſt deſcribed; but this twiſts it's ſtalks about the branches of trees and ſhrubs, being without tendrils, and in this way it will ſometimes riſe to fifteen feet in height; the ſtalk is tough and angular, the leaves broad and ſhaped like a heart; they are perfectly ſmooth and ſhining, and of a gloſſy but very deep green, almoſt inclinable to black; the flowers are very ſmall, and of a greeniſh white; the berries which ſucceed them are red; the root has a kind of black bark, but is white within; and it is full of juice of a ſlimy conſiſtence.

This root is ſaid to be an admirable diuretic, and an excellent remedy in the gravel, and all other obſtructions of urine ariſing from diſorders in the urinary paſſages.

Brook Lime.

THIS herb is to be found about almoſt all ſhallow waters; it has a thick ſtalk, roundiſh leaves, and little bright blue flowers which grow on ſpikes; *brook-lime* riſes to the height of a foot; the ſtalk is round, juicy, and of conſiderable ſize, notwithſtanding which it ſeldom grows upright; it ſtrikes root at any of the lower joints; the leaves are rather broad, oblong, blunt at the end, and ſomewhat indented at the edges; the flowers, which ſtand ſingly on ſhort foot-ſtalks one over another, form a kind of looſe ſpike, the roots, like thoſe of other aquatic plants of the ſame tribe, are fibrous.

Many virtues are aſcribed to brook-lime, but it muſt be uſed freſh-gathered, for all the efficacy is loſt by drying; the juice, taken in the ſpring of the year, is very ſerviceable to perſons who have ſcorbutic habits, but it muſt be taken for ſome time; it operates by urine, but the greater part of it's virtues are of the alterative kind, for it ſweetens the blood, and purges it of foul humours.

Broom.

THIS ſhrub is well known, growing on waſte grounds, on ſtony and light ſoils, in moſt parts of England; it bears yellow flowers in the month of May, and riſes in ſituations which agree with it to the height of three, four, or even five feet; the ſtalks are ſtrong, angular, and of a dark green colour; the leaves are but few, and theſe are alſo ſmall and grow together, ſtanding at diſtances on the long and tender ſtalks; the flowers, which are numerous, are ſhaped exactly like a pea-bloſſom, and are of a very beautiful bright yellow; theſe flowers are ſucceeded by pods which are flat and covered with hair.

The ſtalks of this plant, whilſt they are green, are infuſed in ale or beer for a common drink, in which they are thought to operate by urine, in the removal of obſtructions of the liver and other inteſtines; it is alſo celebrated for the cure of the dropſy and jaundice.

Theſe green ſtalks are alſo ſometimes burnt to aſhes, and thoſe aſhes being infuſed in white wine, the fixed ſalt is extracted, and the wine is ſtrongly impregnated with it; this preparation alſo works by urine, but more powerfully than the former, which however is to be preferred for removing obſtructions.

Buck-

Buck-Beans, or *Buck-Bane*.

THIS herb is univerſally known to the common people in every part of Great Britain, and is ſaid to poſſeſs great virtue. It grows wild in marſhy places, and it's appearance is ſo remarkable that it cannot be miſtaken; it grows to the height of a foot, with three leaves upon each ſtalk, and theſe ſtalks ſpring immediately from the roots, and are round, ſtout, ſmooth, and juicy; the leaves themſelves are large, of an oblong ſhape, reſembling in ſome meaſure thoſe of garden beans; the flowers ſtand upon ſtems without leaves which anſwer the deſcription of the other ſtalks; they are ſmall, but growing together in a large but ſhort ſpike, and being of a white colour tinged with purple, they make a conſpicuous appearance in the cluſter; theſe flowers are hairy within, the root is long and ſubſtantial, and when broken appears white.

The leaves of *Buck-bean*, gathered before the flower ſtalks appear, and dried, are ſaid to be of uſe in the cure of agues, being adminiſtered in powder; but they are principally recommended for the rheumatiſm; and for this diſorder they are to be given for a conſiderable length of time, either in infuſion or as a tea.

Buckthorn.

THIS ſhrub is common in our hedges, bearing pale green leaves, and black berries; it is a large plant, ſometimes growing eight or ten feet high; the bark is dark coloured and ſmooth, and the twigs are ſtrong and tough; the whole body, branches and twigs, are full of ſharp prickles; the leaves are oval, of a very regular and pleaſing form, and neatly indented round the edges; the flowers are ſmall, and without beauty, being of a greeniſh yellow, and growing in little cluſters; the berries are round, ſhining, and in September when they ripen, turn black, and are then as big as the largeſt peper-corns, and contain each three or four ſeeds.

A ſyrup made of the juice of theſe berries boiled with ſugar, is a powerful purge; but it is apt to gripe, unleſs ſome ſpice be added to it: though a ſomewhat rough medicine, it is a ſafe and very good one.

Buckſhorn Plantain.

THIS is a ſmall but pretty plant, which grows commonly in ſandy and barren places; the leaves ſpread round from the root in the manner of a ſtar; the heads are like other plantains, though not at all reſembling it in the leaves; the root is long, but ſlender; the leaves lying flat upon the ground, are narrow and long, but beautifully notched and divided, ſo as to be ſomewhat like a buck's horn; from which circumſtances it derives it's name. Theſe leaves are of a pale green, inclined to white, and ſomewhat hairy; the ſtalks are ſlender, ſeldom riſe to the height of ſix inches, nor though ſo ſhort are they altogether erect; they are round, hairy, and nearly of the colour of the leaves; they bear at the top a ſpike of flowers from one inch to two in length, in all reſpects like the common plantains, only ſomewhat more ſlender.

This plant is alſo ſometimes called the ſtar of the earth, from the figure in which the leaves extend themſelves. Theſe leaves were formerly directed to be bruiſed and applied to freſh wounds to ſtop the bleeding, and heal them; but they are not at preſent in much reputation, either for this uſe, or to cure the bite of a mad dog, for which they were once celebrated, though it is apprehended without foundation.

Bugle.

THIS is alſo a common wild plant, of a very pleaſing growth and figure; the ſtalks are creeping, and bear gloſſy leaves and blue flowers; it is found in damp woods; when the ſtalks are erected to bear the flowers, they riſe to eight or ten inches high, are ſquare, and of a pale green colour, though ſometimes inclining to purpliſh, and have two leaves at each joint, the joints being at ſome diſtance; theſe leaves are of the ſame form with thoſe which ſpring directly from the root, being of an oblong ſhape, broad, the points roundiſh, and generally of a deep green colour, though theſe are ſometimes alſo a little purpliſh, and ſlightly indented round the edges: the colour of the flowers is beautiful, though they are but ſmall; their ſhape is like thoſe of betony; and they grow in a ſort of circles round the upper part of the ſtalks, forming looſe ſpikes; the caps remain, and hold the ſeeds when the flowers wither.

The leaves of this plant are applied to various medicinal uſes; the juice of them is eſteemed good for inward bruiſes; and tea made from them is a very good diuretic.

Bugloſs.

THIS plant is kept in our gardens on account of it's medicinal virtues, but it is very ſeldom uſed; it has but little beauty to recommend it, being a coarſe rough herb, grows a foot or eighteen inches high; the leaves are like thoſe of borage, but they are longer and narrower, and of a deeper green colour; the ſtalks are alſo covered with a rough and prickly hairineſs, like thoſe of borage; and on theſe ſtand leaves of the ſame ſort as thoſe which riſe immediately from the root, but ſmaller; the flowers ſtand on the tops of the branches, and though not very large, make a pretty appearance; they are red when the bud firſt begins to diſcloſe them, but they afterwards change to blue; the flowers appear in June and July; and the root is long, covered with a brown bark or ſkin.

Bugloſs as well as borage, is eſteemed a cordial; and perhaps, with equal juſtice; it is uſed alſo for the ſame purpoſes; and if it poſſeſſes any virtues, they are of the ſame kind: theſe plants alſo grow wild upon the banks of ditches in ſome parts of England.

Burdock.

THE common *burdock* is ſo univerſally known, that it is hardly neceſſary to deſcribe it; it grows a yard or more high, and has leaves of an almoſt triangular figure, and of a pale green colour, with a whitiſh caſt; the ſtalks are round, ribbed, and very ſtrong; the flowers ſmall, of a red colour, and growing among the hooked prickles of thoſe heads which are commonly called burs, and which ſtick to the cloaths; from this circumſtance it takes it's name; and as theſe heads, by this tenacious faculty, lay hold of the fleeces of the ſheep and the garments of mankind, ſo in pulling them off from the plant, the ſeeds are ſcattered, which might otherwiſe rot in this ſubſtantial pod: the root of the burdock is long and large, covered with a brown bark on the outſide, and white within; it is the root which is uſed medicinally, and many and great virtues have been attributed to it; it may be boiled or infuſed in water, and the infuſion or decoction of it is very powerfully diuretic; and it is ſaid to have cured dropſies without any other aſſiſtance; the ſeeds poſſeſs the ſame virtue, but not in an equal degree; the root is reputed to have a perſpirative quality, and to be uſeful in fevers; but it's operation by urine in removing obſtructions, ſeems to be the moſt valuable of it's properties.

Burr-Reed.

THIS common water plant has leaves like flags, and rough heads which contain the ſeeds; it grows two or three feet high; the ſtalks are round, ſtrong, upright, and of a green colour; the leaves, which are long and narrow, are ſharp at the edges, and have a prominent acute ridge along the middle of the back; they are of a pale green colour, and a freſh and pleaſing appearance; the flowers are yellowiſh and make an indifferent figure; they ſtand in circular tufts about the higher parts of the ſtalk; lower down ſtand the rough ſeed-pods, which are commonly called *burrs*, from whence the plant derived it's name; theſe grow to the bigneſs of a large nutmeg, and are rough and of a green colour; the root is made up of a quantity of fibres.

The unripe pods or fruit are uſed in medicine; they are ſaid to be of an aſtringent quality, and to have been uſed with ſucceſs in fluxes of the belly, and all kinds of internal hæmorrhages; they may be infuſed in Port wine, with a little cinnamon: in ſome parts of England the juice is expreſſed and reported to be applied to freſh hurts with great ſucceſs; old ulcers and other wounds of long ſtanding are alſo waſhed with a ſtrong decoction of the pods, which is ſaid to cleanſe them and contribute to correct the acid humour.

Burnet.

THIS pretty wild plant grows in paſture lands, by way-ſides and in dry places, and flowers in July; it has been of late years cultivated as an artificial graſs, and is ſaid to produce good fodder; thoſe leaves which riſe immediately from the root, are extremely beautiful; they are of the winged kind, and are compoſed of a great number of ſmall leaves, growing on each ſide a middle rib, and terminating in a ſingle one; they are broad, round, and ſhort, but elegantly notched at the edges; the ſtalks riſe to the height of twelve or fourteen inches, and are round and ribbed, of a purpliſh or green colour, and very bare of leaves, the few they have being, however, like thoſe which ſpring from the root; on the tops of theſe ſtalks ſtand the flowers, which are diſpoſed in ſmall round cluſters, being inconſiderable in ſize, and of a pale colour; they have a number of filaments in the middle.

Burnet is ſaid to be a cordial and perſpirative, and is preſcribed in fevers; it is alſo uſed in ſummer drinks with borage; the root is aſtringent; and dried and powdered, is reputed to ſtop fluxes, and reſtrain the overflowing of the monthly diſcharges of females.

Burnet Saxifrage.

THOUGH not ſo common as the laſt mentioned, this herb is alſo found wild in ſome dry paſtures and under hedges, in different parts of the kingdom; it ſometimes reaches the height of two feet and has the flowers in dropping bunches; the ſtalk is ſtrong, ribbed, and branched; the leaves riſing from the root are winged, and the ſmall leaves of which they are compoſed are of a deep green, narrow, and indented; the leaves which grow upon the ſtalks are ſtill ſmaller and narrower: though the flowers are of inconſiderable ſize, and white, yet, ſtanding in large cluſters, they make a figure; the root is white within, and of a hot and acrid taſte, and this is the only part uſed, which ſhould be taken up and dried early in ſpring, before the ſtalks ſhoot; it is recommended in colics and for diſorders of the ſtomach, and operates chiefly by urine.

Butcher's Broom.

THIS plant, or rather ſhrub, is common in waſte grounds and upon open heaths; it has ſmall prickly leaves and a buſhy top, and ſeldom grows above eighteen inches high; the ſtalks are round, ſubſtantial, fluted, and very tough; they are without leaves toward the bottom, and divided into different branches toward the top, where they are covered with ſhort, broad, oval, but pointed leaves, the point ending in a prickle; theſe leaves are of a bluiſh green in colour, very fleſhy and full of juice; the flowers are ſcarce diſcoverable, for they grow in a very extraordinary manner upon the backs of the leaves, and are very ſmall but of a purple colour; the flowers are each ſucceeded by a ſingle berry, which is round, of the ſize of a pea, and grows red as it ripens; the roots are numerous, thick, and white; and this root is the part uſed in medicine to remove obſtructions, to which end it is ſaid to work powerfully by urine, and to be efficacious in jaundices, in ſtoppages of the monthly diſcharges, and in gravel, ſtone, and other diſorders which occaſion retention or ſuppreſſion of urine.

Butter Bur.

THIS plant grows generally in wet places, where it makes no inconſiderable figure; the flowers appear before the leaves, which hardly ſeem to belong to the ſame plant; the ſtalks are juicy, round, ſtrong, and of a whitiſh colour, without leaves, the places of which are ſupplied by a kind of film; on the top of each ſtalk ſtands a ſpike of flowers, which are of a light red colour; the height of the whole ſeldom exceeds eight inches; the flowers appear very early in the ſpring, and when they die, the leaves grow up; theſe are round, green on the upper ſide, and whitiſh beneath, of vaſt ſize, ſometimes reaching to twelve feet in breadth, and ſtand ſingly upon hollow foot-ſtalks, of a purpliſh white or green colour; the root is white and long, creeping juſt under the ſurface of the ground.

This root is medicinally uſed; it is highly ſpoken of as a remedy in peſtilential fevers and other contagious diſorders, being ſaid to excite perſpiration; it is alſo preſcribed as a cordial to prevent hyſteric faintings, and it is a good diuretic, and excellent in the gravel; the powder of the dried root may be taken, or an infuſion or decoction may be made of the root, bruiſed or ſliced.

Calamint.

THIS herb is frequently found wild in hedges and other dry places, and is ſaid to poſſeſs many virtues. It grows only eight or ten inches high, has round dark green leaves, and bears white flowers; the ſtalks are ſquare and much branded; the leaves are about the bigneſs of the nail of the thumb, ſomewhat hairy, and ſlightly indented at the edges; the flowers, which are of a whitiſh colour tinged with purple, ſtand in cluſters ſurrounding the ſtalks; the root conſiſts of a few fibres. This herb muſt be gathered juſt as it is about to flower, and carefully dried; it may afterwards be given in the manner of tea, in which form it is recommended in weakneſſes of the ſtomach, and habitual colics, but muſt be perſevered in for a conſiderable length of time, in order to effect a laſting change in the conſtitution: this whole plant is ſtrongly and agreeably ſcented.

Pennyroyal Calamint.

THIS little plant is nearly of the ſame kind as the laſt-mentioned, and is found in much the ſame places; but it is rather more common; it riſes a foot high; the ſtalks are ſtrong and firm; the leaves ſmall and of a green colour, inclinable to white, and more hairy than the other calamint: the flowers of this are ſmall and white, tinged alſo with purple; the plant is more erect and leſs branched than the other, and has a very ſtrong but by no means pleaſant ſmell.

If this plant is preſerved dry as the other, and adminiſtered in the ſame manner, it is reported to be a good remedy for ſtoppages and obſtructions of the monthly diſcharges; and if taken for a conſiderable length of time, and repeated at proper periods, to bring them to a regular courſe.

Calves Snout, or Snap Dragon.

THIS plant, which grows wild in many other parts of Europe, is commonly found in our gardens and on garden walls; where it is wild, it's natural ſituation is on hilly, barren, and rocky grounds, for which reaſon the top of an old wall with us ſeems to agree with it; the ſeeds being light, are eaſily carried thither by the wind, where it always ſtrikes and the plant flouriſhes; it grows two feet high, the ſtalks are round, ſtrong, tough, but not quite upright, generally bending a little towards the bottom; the leaves, which are very numerous, are of an oblong ſhape, narrow, plain at the edges, round at the ends, and of a blue green colour; the flowers are large, and of a good red; they grow in a kind of looſe ſpikes at the tops of the ſtalks; the root is of an oblong form, and white when broken or cut.

In medicine only the freſh tops are uſed, an infuſion of which operates by urine, and has been recommended in the jaundice, and in other diſeaſes ariſing from obſtructions in the inteſtinal parts; but many Engliſh plants excel in this particular, and the taſte of the infuſion being by no means palatable, it is hardly worth while to make uſe of it.

Camomile.

THIS plant is univerſally known, growing wild in every quarter of the kingdom; it is of a beautiful green colour, emits a fragrant ſmell, and bears flowers reſembling daiſies; it is commonly found on damp heaths, and is not improved by being brought into gardens; it grows larger there, but has leſs efficacy. *Camomile* ſpreads it's branches upon the ground, taking root at the joints; the ſtalks are round, of a full green, and ſubſtantial; the leaves are very finely divided, and of a dark green colour, almoſt approaching to black; the flowers grow upon long foot-ſtalks, white at the edges, and yellow in the middle, and theſe are principally uſed for medicinal purpoſes; the double ſort, which is commonly cultivated in gardens for ſale, have very little virtue in compariſon of the ſingle ones. Taken in tea they afford a pleaſant and grateful bitter, and are excellent for diſorders of the ſtomach; or they may be given dried and powdered, and in this way they have ſometimes cured agues, a diſorder which is frequently removed by bitters; the tea made of them is alſo good in the colic, working by urine; the flowers dried and powdered and mingled with rhubarb in the ſame ſtate, compoſe thoſe ſtomach pills which have been celebrated under the name of Speediman's; a decoction of the dried flowers is alſo an excellent fomentation in violent bruiſes, the hot flannels as they are wrung out of it, being ſprinkled with camphorated ſpirits of wine.

White Campion.

THIS plant grows wild in hedges and dry paſtures, having hairy leaves and white flowers; it riſes to the height of a foot or eighteen inches; the ſtalks are round and hairy, the leaves of an oval figure and alſo hairy, growing two at every joint; the colour of the leaves is a duſky green, and the edges are plain; the flowers are white and of a moderate ſize, they grow in ſmall cluſters at the top of the branches, each having a ſeparate foot-ſtalk.

This plant ſeems not ſo much regarded for it's virtues, as it deſerves; the country people in ſome parts of England gather the flowers and give a ſtrong decoction of them in the whites, and other weakneſſes of the like kind, with ſucceſs.

Canterbury Bells.

THIS beautiful wild plant grows plentifully by the ſides of roads, in dry paſtures, and undiſturbed grounds; the leaves are like thoſe of the ſtinging-nettle; the flowers are large, handſome, and of an elegant blue colour; it ſometimes grows two or three feet high; the ſtalks are ſquare, ſubſtantial, ſtraight, ſtrong, and covered with hairs; the leaves do not grow with any regularity, they are of a duſky green, ſtanding upon long foot-ſtalks, and are broad at the baſes and ſharp towards the points, and the edges neatly and ſharply indented; the leaves alſo are hairy and feel rough to the touch; at the top of every branch grow the flowers, ten or a dozen together; they are hollow and divided into ſeveral parts at the edge or extremity; the flowers ſometimes vary in their colour, being either pale blue, reddiſh, or white, according to the difference of the ſoil and ſituation, but the plant is the ſame.

The parts of this plant which are chiefly uſed as medicines, are the freſh tops with the buds of the flowers upon them; theſe contain moſt of the virtues, but the dried leaves are ſometimes uſed; an infuſion of either, ſharpened with a few drops of ſpirit of vitriol, and ſweetened with honey, may be uſed with ſucceſs as a gargle for a ſore throat; and from this virtue one of the common Engliſh names of this plant is *throat-wort*; uſed in this way it is ſo innocent, that if it ſhould be ſwallowed accidentally it will not prove injurious, though in all ſuch caſes it is proper to ſpit the liquor out carefully, becauſe if it be ſuffered to go down, it will carry with it the foulneſs which it may have waſhed from the affected parts.

Caper Shrub.

THOUGH this ſhrub is not a native of this country but of France and Italy, yet as it is kept in our gardens it may not be improper to mention it. The pickles which are ſold under the name of *capers* are the unblown buds of the flowers; the part to be uſed in medicine is the bark of the roots.

This ſhrub does not riſe to any great height; and the branches are weak and ſcarce able to ſupport themſelves, they are tough and armed with ſharp thorns or prickles; the leaves are not placed in any regular form, they are of an oval or round ſhape, and the thorns are hooked like thoſe of the bramble; the flowers when they expand are a kind of purple, and make a very pretty appearance; the fruit is roundiſh.

The bark of the root taken in powder or infuſion, is ſaid to be a remedy for obſtructions of the inteſtinal parts, the liver and ſpleen, in particular; it is alſo reported to be efficacious in removing the jaundice and hypocondriac complaints; and it is recommended to aſſiſt digeſtion.

Caraway Plant.

THIS plant grows wild in ſome parts of England, and particularly in Lincolnſhire; it is cultivated in Germany for the ſeed.

It grows to the height of a yard; the ſtalks are ribbed and firm, the leaves divided into very fine parts, and the flowers white and ſmall, but they grow in tufts or umbels on the tops of the branches; the ſeeds which ſucceed them are too well known to require any deſcription; if theſe ſeeds are chewed they afford relief in the colic and in diſorders of the ſtomach. The root was formerly eaten; being boiled tender, it is ſaid to be as agreeable as the parſnip; the root alſo yields an oil which uſed to be taken on ſugar, five or ſix drops as a doſe, for pains of the belly, eſpecially thoſe of the flatulent kind.

Carline Thiſtle.

THE leaves of this plant riſe from the root without any ſtalk; they are long, narrow, of a darkiſh green colour, divided, and prickly at the edges; they ſpread themſelves upon the ground in form of a ſtar; in the midſt of theſe leaves, the flower alſo appears without a ſtalk, ſpringing immediately from the root, with ſeveral ſmall leaves round it; it has the head of a thiſtle; and the flowery part is white on the edges, and yellow in the middle; the root is long, brown on the outſide, and of a reddiſh colour within; the taſte of it is warm and aromatic.

The root only of this plant is uſed in medicine, and is reported to be a remedy for the plague; it is alſo recommended in nervous complaints, and in ſtoppages of the periodical diſcharges.

Wild Carrot.

THIS plant grows wild about hedges, in dry paſtures, near farm yards, and in other places not uſually turned up; it ſometimes riſes near a yard high, bearing ſmall flowers, and after them rough ſeeds, diſpoſed in tufts at the tops of the branches; theſe are concave, and of a regular form.

The ſtalks are ribbed and firm; the leaves divided into numerous partitions, of a pale green, and ſomewhat hairy; the flowers are white.

The ſeed is the only part uſed in medicine, and allowed to be a very good diuretic; and to be ſervicable in all ſuch complaints as are occaſioned by the gravel and ſtone, and all obſtructions of urine; it is alſo good in ſtoppages of the periodical diſcharges; and the beſt way of taking it, is to infuſe a large handful of the ſeed in ten gallons of ale, and take it as a common drink.

Cat Mint.

FEW plants are more common than this about the hedges in moſt parts of England; it grows a yard high; the ſtalks are ſquare, of a whitiſh green colour, hairy, and upright; the leaves ſtand two at a joint, broad at the baſe, and terminating in an obtuſe end; they are lightly indented at the edges, and are of the ſame colour as the ſtalks on the upper ſide, and very white underneath; the flowers are ſmall and white, growing in ſpiked cluſters, and ſurrounding the ſtalks at certain diſtances. The whole plant has a very ſtrong, and ſomewhat diſagreeable ſmell.

Cat mint is to be gathered at the time it is juſt getting into bloom, and dried. It is particularly recommended in female diſorders, againſt hyſteric complaints, vapours, and fainting fits; it moderately promotes the periodical diſcharges and neceſſary evacuations after delivery. In all caſes, the beſt way to adminiſter it, is in an infuſion.

Great Celandine.

THIS plant alſo grows wild, and has large leaves and yellow flowers; and when broken in any part of the ſtalk or leaves, emits a yellow juice; it ſometimes riſes three feet high, but the ſtalks are not very ſtout; they are round, green, and rather naked, with thick joints; the leaves, which ſtand two at each joint, are large, long, and very deeply divided at the edges, and the colour of them is a yellowiſh green. The flowers are ſmall, but of a beautiful yellow, and ſtand on long foot-ſtalks, many together.

Celandine muſt be uſed green, loſing the greateſt part of it's virtues by drying; the juice is the beſt way of giving it; and this medicine is highly extolled in the jaundice, and all obſtructions of the internal parts; and if perſevered in a ſufficient time, will be found ſervicable in the ſcurvy; the juice alſo is uſed ſucceſsfully for ſore eyes; and warts are removed by it.

Little Celandine.

THIS plant differs ſo totally from that laſt deſcribed, that it is ſomewhat ſurprizing how it could obtain the ſame name. The only circumſtance in which they reſemble each other is, that they have both yellow flowers. The great celandine approaches neareſt to the poppy tribe; the ſmall, to that of the crow-foot; and their virtues are as diſtinct as their forms.

Little Celandine ſeldom grows to any conſiderable height, but ſeen almoſt every where in damp places in the ſpring of the year; it has broad leaves of a deep green, and gloſſy yellow flowers. The leaves are not above an inch long, and nearly the ſame breadth, reſembling ſomewhat thoſe of the garden hepatica, and are frequently ſpotted; they riſe ſingly from the root, on long and ſmall ſtalks, deſtitute of leaves; the flowers alſo riſe from the root on ſtalks of the ſame deſcription, and are as broad as a ſhilling, of a fine ſhining yellow colour, and compoſed of many leaves; the root has ſmall white tuberous lumps connected together by many fibrous ſtrings.

The roots are ſtrongly recommended to prevent and cure the piles; and to this end the juice of them is to be taken inwardly; ſome people make a cooling ointment of the leaves, which they chop in pieces, and boil them in lard till they are criſp, then ſtrain off the lard, which by this proceſs takes a fine green colour. The root operates chiefly by urine, but in no very great degree.

Little Centuary.

THIS plant grows wild in dry places in many parts of England; it is ſeldom above eight or ten inches high; the leaves are of an oblong ſhape, broad, and blunt at the points; the ſtalks are ſtrong and erect; and the flowers of a fine tender red; a cluſter of leaves an inch or more long, grows immediately from the root; the ſtalks are divided into ſeveral branches towards the top; the flowers are long and ſlender, and ſtand in cluſters.

An infuſion of the leaves and ſtalks of this plant is ſaid to be an excellent ſtomachic; the taſte is a pleaſant bitter; it is recommended to ſtrengthen the ſtomach, and excite an appetite; and is reputed to be powerful in removing obſtructions of the liver and ſpleen; on which account it is commonly preſcribed in jaundices; and dried and powdered, it has alſo been long celebrated among country people for the cure of agues, in common with other bitters; it is alſo ſaid to be uſeful applied to green wounds; and a decoction of it efficacious in cleanſing ulcers.

There is alſo a greater *centuary*; but it is not a native of Great Britain, nor uſed by us in medicine.

Chaſte Tree.

THOUGH this little ſhrub is a native of Italy, yet it is common in our gardens; it ſeldom exceeds five or ſix feet in height; the body is rough, but the branches which are ſmooth, tough, of conſiderable length, and of a grey colour, ſpread like the fingers of a human hand, and when they are opened, five, ſix, or ſeven of theſe diviſions ſtand on each ſtalk; theſe leaves are of a deep green above, and of a more light, nearly white beneath; the flowers are ſmall, of a pale reddiſh caſt, and ſtand in long looſe ſpikes; the fruit which ſucceeds theſe flowers, is about the ſize of a pepper-corn.

This ſhrub is but little uſed as a medicine. A decoction of the leaves and tops, is ſaid to remove obſtructions of the liver and other inteſtines.

Black Cherry Tree.

THIS tree is univerſally known; it grows to a conſiderable height, and is well ſhaped; the leaves are broad, round, but ſharp at the points, and indented round the edges; the bloſſoms are white, and the fruit black when it is ripe. The medicinal part is the kernel within the ſtone; and we mention it merely to obviate vulgar errors concerning it: theſe kernels having been conſtantly belived to be an antidote againſt apoplexies, palſies, and nervous diſeaſes, a water diſtilled from them, was univerſally uſed as a remedy for convulſion, and other fits in children; but from modern experience, it is highly probable, that this water occaſioned the very diſorders it was given to remove. Laurel water, when made of great ſtrength, has been on a late melancholy occaſion proved to be ſudden poiſon; and when weak, it taſtes like black cherry-water, but is not then totally pernicious: in like manner, the black cherry-water which uſed to be given to children, weak drawn, has been found to have poiſonous qualities, when it's ſtrength has been conſiderably increaſed; is it not therefore natural to ſuppoſe, that in any degree of ſtrength, it may do miſchief; and may not the deaths of great numbers of children be attributed to the univerſal preſcription of this medicine for more than half their diſorders.

The gum which works out upon the bodies and branches of cherry trees, is of the ſame nature with gum arabic, and may be uſed in the many caſes wherein the laſt-mentioned gum is directed to be taken.

Winter Cherry.

THIS is a handſome plant; and though not a native of this country, is commonly kept in our gardens; it grows two feet high, not very ſtraight, nor much branched; the ſtalks are ſubſtantial, ſtrong, and angular; the leaves large and broad, with ſharp points; the flowers are of moderate ſize, and white, but have yellow threads in the middle: the firſt which ſucceeds the flower, is a round red berry as big as a common red cherry; and this berry is contained in a green round hollow huſk, of the ſize and figure of a walnut.

Theſe berries are the part uſed in medicines; they muſt be ſeparated from the huſks and dried, and are then to be given in powder or decoction in ſtranguries, retention ſuppreſſion or heat of urine, in the gravel and ſtone; they are alſo preſcribed in jaundices, dropſies, and ſuch other diſorders as proceed from obſtructions, but their efficacy is not ſo great as to entitle them to much confidence unaccompanied by other medicines.

Chervil.

THIS is a ſallad herb very commonly cultivated in gardens, but not deſtitute of medical virtue; it's manner of growth is like parſley, only that the leaves are more divided and of a paler colour, inclining to yellow; the ſtalks are round, ribbed, hollow

low, and of the ſame colour as the leaves; they divide into ſeveral branches, and grow to about the height of two feet; the leaves on the ſtalks reſemble thoſe from the root, but are ſmaller; the flowers are white, and ſtand in large cluſters at the tops of the branches; the ſeeds are large and ſmooth, the flowers have a bitter taſte.

The roots of *chervil* are preſcribed in all caſes where the urine is retained or ſuppreſſed, though their operation is by no means powerful; a decoction ſhould be made of them.

The Cheſnut Tree.

THIS tree is well known; it is large, ſpreading, and of handſome growth; the bark is ſmooth and of a grey colour; the leaves long, and of proportionable breadth, deep and elegantly indented round the edges; they are of a lively but ſtrong green; the flowers are a kind of catkins, reſembling thoſe of willows, long and ſlender, and of a colour inclining to yellow; the fruits are covered with a rough ſhell armed all over with prickles; and under that each particular nut is covered with a firm ſmooth, and poliſhed brown coat, and within that a thin ſkin, of an auſtere taſte, immediately over the kernel.

This thin ſkin laſt mentioned, is the only part uſed in medicine; it muſt be ſeparated from the cheſnut, before it is too ripe, and dried; and it then becomes a very good aſtringent, and ſtops purgings and overflowings of the periodical diſcharges.

Earth Cheſnut, or Earth Nut.

THIS plant takes it's name from it's root, which is of the bigneſs of a ſmall cheſnut, roundiſh, brow non the outſide, and white within, and of a ſweetiſh taſte: the plant riſes a foot high, but ſeldom higher; the leaves are divided into fine and numerous partitions; the ſtalk is upright, ſtrong, round, and green; the flowers white and ſmall, but they grow in large tufts on the tops of the branches.

The root, roaſted in the manner of a cheſnut, and eaten, is ſaid to have great virtues as a ſtrengthener, but it is to be doubted if it poſſeſſes any medicinal quality.

Chick Weed.

THERE are ſeveral ſorts of this very common weed, ſome of which are ſaid to poſſeſs many medicinal virtues; that which is moſt efficacious in medicine is the plant which grows ſo plentifully in every garden; it is low and much branched; the ſtalks are round, green, brittle, and divided; they commonly lean to the ground; the leaves are ſhort and broad, thick and juicy, of a chearful green, not indented at the edges, they grow two at every joint; the flowers are very ſmall and white.

The leaves and ſtalks of this plant, cut to pieces and boiled in lard till they are criſp, become a cooling ointment, of a fine green colour, and the juice is directed to be taken inwardly for the ſcurvy; and in decoction it is preſcribed for hectic heats, conſumptions, and internal inflammations; it was anciently uſed in all caſes of extraordinary heat both internally and externally.

Chich.

THIS is a plant of the pea kind, and ſown in ſome places for the produce as peaſe; the plant is low and much branched; the ſtalks round, brittle, weak, and hairy, of a pale green colour; the leaves are like thoſe of the pea, but each diſtinct leaf narrower and of a paler green, and ſomewhat hairy like the ſtalk; the flowers are ſmall and white, and in form reſemble the bloſſoms of peaſe; the pods are ſhort, thick, and hairy, ſeldom containing more than two and often only one ſeed in each. They are eaten in ſome places, and as a medicine they operate as a mild diuretic.

Cinque Foin.

THIS plant creeps wild about way ſides, and in old paſtures and other undiſturbed places; the ſtalks are round, ſmooth, and commonly of a reddiſh colour, they lie upon the ground, taking root at the joints; the leaves ſtand on long foot-ſtalks, five on a ſtalk; theſe leaves are about an inch long but narrow, of a deep duſky green colour, and ſomewhat indented at the edges; the flowers are alſo ſupported by long foot-ſtalks; they are yellow and about the ſize of a ſhilling, and the colour of them extremely bright and pleaſing; it has a large and long root covered with a brown bark but whitiſh within.

The bark of the root only is uſed in medicine; it ſhould be dug up in April, taken off and dried. Being reduced to powder, it is given as a remedy for all ſorts of fluxes; it ſtops purgings, and the overflowings of the female diſcharges, and that more effectually than moſt other medicines.

Clary.

THIS plant is commonly kept in our gardens, not in honour of it's beauty but of its virtues; it grows from two feet to two feet and a half high; the leaves are rough, and the flowers of a faint blue; the ſtalks are thick, juicy, and upright, clammy to the touch, and ſomewhat hairy; the leaves are large, wrinkled, and of a duſky green, broad at the baſe, and growing narrow towards the point, which is obtuſe; the flowers grow in long looſe ſpikes, and are diſpoſed in circles round the upper parts of the ſtalks; they are large and gaping, and the cups in which they ſtand are ſtout and a little prickly.

The whole herb, freſh or dried, is eſteemed medicinal, being cordial and mildly aſtringent. It has the reputation of ſtrengthening the ſtomach, relieving head-aches, and ſtopping thoſe diſcharges which are occaſioned by weakneſs; but for this laſt purpoſe, it is neceſſary to continue the uſe of it a very conſiderable length of time; and as there are many remedies more powerful, it is at preſent much diſuſed. A mucilage was formerly made from the ſeeds, and applied to diſſolve and diſperſe ſwellings; and an idle notion prevailed that this preparation aſſiſted in drawing out thorns and ſplinters from the fleſh.

A kind of wild clary grows on our ditch banks and in dry grounds, which probably poſſeſſes the ſame virtues with that we have juſt deſcribed; the ſeeds of this are commonly put into the eyes to take out any little offenſive ſubſtance which happens to get into them; as ſoon as they are put in, they gather a coat of mucilage about them which catches hold of any foreign matter which it meets with in the eye, and both the ſeed and that are taken out together.

Country houſewives make a wine in which this plant being an ingredient, it bears the name of it; but however this might be formerly admired, it is not at preſent in much eſteem.

Cleavers, or Clivers.

THIS herb grows in almoſt every hedge, and is univerſally known by ſticking to people's cloaths as they touch it; the ſtalks are ſquare and very rough, run two feet long, but are ſo weak, brittle, and unable to ſupport themſelves, that they climb among buſhes and other plants; the leaves are long and narrow, of a pale green, growing ſeveral at every joint, and ſurrounding the ſtalk in the manner of a ſpur-rowel; the leaves are rough as the ſtalk, ſticking to every thing they touch; the flowers are ſmall and white; the ſeeds grow two together, are round, and reſemble the reſt of the plant in roughneſs; the root is fibrous.

The juice of the freſh herb is ſaid to operate by urine, in cooling the body, and to be good againſt the ſcurvy and other external diſorders; it was formerly eſteemed a cure for the king's evil; but it has been long known to be inefficacious in the removal of that inveterate diſeaſe.

Clove July Flower.

THIS very beautiful flower is common in moſt gardens; and has obtained it's name from the aromatic ſmell, which reſembles the clove ſpice, and from it's flowering in the month of July; this carnation is only of one colour, a deep and fine crimſon or purple; the plant grows to the height of two feet; the leaves, like other pinks and carnations, are graſſy; the ſtalks round and jointed; the flower grows at the extremities of the branches, and the colour of the whole plant is a bluiſh green.

The flowers are eſteemed cordial, and ſerviceable in diſorders of the head; they are dried and taken in powder, or in the form of tea, but the beſt preparation is the ſyrup. This is made by pouring five half pints of boiling water upon one pound and a half of the flowers picked from the huſks, and with the white parts cut off, after they have infuſed twelve hours, ſtraining off the clear liquor, without preſſing the flowers, and diſſolving in it five pounds of the fineſt ſugar; this makes a moſt elegant and agreeable ſyrup.

Cockle.

THIS is a tall, erect, and beautiful plant, which grows wild in corn-fields, with red flowers and narrow leaves; it is two feet high, the ſtalk ſingle, round, hairy, and, though ſlender, very firm and perfectly upright; the leaves, which are not very numerous, ſtand two at a joint; they are long and narrow, ſomewhat hairy, and of a bright green colour; the flowers ſtand ſingly at the tops of the ſeveral branches; they are very large, of a lively red, and are contained in an elegant cup, compoſed of five narrow hairy leaves, which are of a much greater length than the flower itſelf; the ſeed-veſſel is round, and the ſeeds black; they are frequently mixed among grain, and communicate a diſagreeable taſte to the flour.

The ſeeds only are uſed in medicine; they operate by urine, and remove obſtructions; promote the monthly diſcharges, and are good in the dropſy and jaundice: theſe ſeeds ſhould be powdered and made into an electuary, in which form they muſt be perſevered in for a conſiderable length of time; for medicines, whoſe virtues are directed againſt chronic diſeaſes, do not take effect at once, and the operation of vegetables is certainly ſlower, though in many caſes not leſs efficacious than that of chymical preparations.

Sea Colewort, or Sea Bindweed.

THIS is a plant that grows wild on the ſea-coaſt in many parts of England, and is ſaid to poſſeſs many powerful virtues as a medicine; the ſtalks are twelve or fourteen inches in length, round, of a green or purpliſh colour, but they are weak and unable to ſupport themſelves upright; the leaves are alſo nearly round, though ſomewhat heart-ſhaped at the bottom; they are of a gloſſy green colour, and ſtand upon long foot-ſtalks; the flowers are large, of a bell ſhape, and red colour; the roots are ſmall and white, and when any part of the plant is broken, and eſpecially the root, it emits a milky juice.

The manner in which this plant is directed to be uſed, is to gather it freſh, when it is near flowering, and boil it in ale with ſome nutmeg, and a clove or two; this preparation, taken in quantities ſuited to the ſtrength and conſtitution of the patient, is a ſtrong purge, and ſometimes operates alſo by urine; but this effect does not interrupt the other; people of robuſt conſtitutions, may take it with ſucceſs; and it is recommended to cure dropſies and rheumatiſms; and where the habit of body is ſtrong enough to bear a few ſmart purges of it, it has been known to remove the conſequences of recent venereal infection; if the juice which oozes from the ſtalk and root is ſaved, it hardens into a ſubſtance like ſcammony, and is an exceeding good purge.

Colt's Foot.

TO this common wild herb many virtues are attributed. It is ſo different in it's ſpring and ſummer ſtate, that it is ſcarce to be known for the ſame plant; the flowers appear early in ſpring, without the leaves, growing on ſtalks about ſix or eight inches high; theſe ſtalks are round, juicy, and of a reddiſh colour, and bear a kind of films inſtead of leaves; the flowers grow ſingly at the tops of the ſtalks, are of a yellow colour, and about the ſize of thoſe of dandelion, which they very much reſemble.

After the flowers are withered, the leaves ariſe, and are as broad as a man's hand, round, and ſupported on thick hollow ſtalks; they are green on the upper ſurface, and white and ſomewhat downy beneath; the flowers are not regarded, the leaves only are uſed.

This herb is recommended to cure coughs, conſumptions, and ſhortneſs of breath; a ſyrup made from the juice, or a ſtrong decoction, ſweetened with honey, are the preparations in which the greater part of it's virtues are contained.

Columbine.

COLUMBINE is a native of this country, though it is commonly preſerved in gardens for the ſake of the flower. It grows about two feet high; the leaves are divided into many parts, but ſeem rather to ſtand three together; the ſtalks are round, ſtrong, erect, and ſomewhat hairy; the flowers large, and of a blue colour; the ſeeds are contained in a ſort of horned pods; the leaves and the ſeeds are uſed in medicine; a decoction of the former, is reported to be a remedy for ſore throats; and the ſeeds to remove obſtructions, and for the cure of the jaundice, and other complaints ariſing from theſe cauſes: a decoction of the leaves and ſtalks is ſaid to be uſeful in female weakneſſes.

Comfrey.

THIS plant is commonly found by ditch ſides in many parts of England; it riſes to the height of a foot and a half; the leaves are large, long, but rather narrow, rough to the touch, and of a deep dingy green, they are thick, angular, and erect; the flowers, which grow near the tops of the branches, are white, though in ſome inſtances reddiſh, and they are of a ſmall ſize, and ſometimes hang downwards; the root is ſtout, black without, and irregular, but white when it is broken or cut, and full of a glutinous juice: this root is the part taken medicinally, and may either be uſed freſh, or made up into a conſerve, with three times the weight of ſugar; it is ſaid to be a remedy for defluxions of ſharp humours falling on the lungs, occaſioning conſumptions, and for the whites; it is alſo recommended for ſpitting of blood, bloody fluxes, and other internal hæmorrhages, and for inward bruiſes.

Corolline.

THIS is a ſmall ſea plant, growing commonly about our own coaſts; it is of a ſtony nature, but not like red or white coral; it does not grow above three inches high, and is very much branched; young ſhoots alſo ſpring from different parts of the branches; it is without leaves, nor are any flowers viſible, but the whole plant is made up of ſhort joints; it is commonly of a greeniſh caſt, though ſometimes of a reddiſh colour; but if it is thrown upon the ſhore, and remains ſometime expoſed to ſun and air, it bleaches and becomes quite white: it naturally adheres to ſhells and pebbles. That which is freſheſt poſſeſſes the medicinal virtues which are conſiderably leſſened by it's being bleached.

The principal uſe made of it is as a remedy againſt worms in children, from one ſcruple to half a dram for a doſe.

Cornel Tree.

THIS tree is of the ſize of an apple tree, which it alſo reſembles in manner of growth; the bark is greyiſh; the ſmall branches tough; the leaves are oblong, broad, pointed, and of a beautiful green colour, but not indented at the edges; the flowers are ſmall, and of a yellowiſh caſt; the fruit is about the ſize of a cherry, but hath a larger ſtone; it is oblong, red, and fleſhy; the ſkin aſtringent; it bloſſoms early in the ſpring, but the fruit does not ripen till autumn.

The fruit is uſed in medicine; it may be dried and adminiſtered in powder, or the juice boiled into a ſyrup; either way it is ſaid to be cooling and gently aſtringent, and is a ſafe and pleaſant medicine in ſuch fevers as are accompanied with purgings; and to reſtrain exceſſive diſcharges, either monthly, or after child birth.

A *wild cornel tree* grows in our hedges, which is called the *female cornel*, or *dog berry*; this is only a ſhrub, and ſeldom grows above four or five feet high; it has broad leaves and black berries; but this is never uſed medicinally.

Corn Marygold.

AMONG the many beautiful wild plants growing in corn fields, this is conſpicuous; it has large blackiſh leaves, and bears flowers reſembling marygolds; it riſes to two feet high, and has numerous ſtalks, which are round, ſtrong, tolerably upright, and much branched; the leaves are long, of great breadth, and of a bluiſh green; they are narrow at the baſe, and grow larger towards the end, and they are deeply indented at the ſides; they are not placed on the ſtalks in any regular form; the flowers are nearly as broad as a half crown piece, and are of a very pleaſing yellow colour, with a cluſter of threads in the middle; the root is compoſed of a number of fibres.

When the flowers are freſh gathered and juſt blown, they contain moſt virtue; and are recommended to remove all obſtructions, and operate chiefly by urine; an infuſion of theſe flowers given in the quantity of half a pint warm three times a day, is ſaid to have cured a jaundice, without any other medicine. The dried herb poſſeſſes the ſame virtue, but in a much leſs degree.

Coſtmary.

THIS plant is preſerved in gardens, not much on account of it's beauty, but for virtues which were very liberally aſcribed to it. It grows from twelve to eighteen inches high, and has cluſters of naked yellow flowers reſembling thoſe of tanſy; the ſtalks are ſtrong, ſtout, green, and erect; the leaves oblong, narrow, and of a pale colour, and beautifully indented; the flowers are only a number of deep yellow threads.

It was formerly in great reputation as a ſtrengthener of the ſtomach, for relieving head-aches, and for removing obſtructions of the liver and ſpleen, but of late years it's credit ſeems to have declined conſiderably.

The Cotton Thiſtle.

THIS is a wild plant, common by our way-ſides. It grows to a conſiderable height and ſize, ſometimes to four or five feet, and is known by having large white prickly leaves and red flowers; thoſe leaves which ſpring immediately from the root, are ſometimes a foot or eighteen inches long, of more than half that breadth, deeply indented at the edges, and armed with yellowiſh thorns; theſe leaves are of a whitiſh green, and ſeem covered with a downy matter reſembling cotton, from whence it has it's name; the ſtalks are ſtout, round, ſubſtantial, and erect; they are alſo winged with a ſort of leafy ſubſtance which riſes from them, and are furniſhed with the ſame ſort of prickles as are upon the leaves; the ordinary leaves, which grow upon the ſtalks, are like thoſe which riſe from the root, only that they are more deeply indented, and have many more prickles; the flowers are purple, ſtanding in long prickly heads, making an elegant appearance; the root is very long, large, and white within, and this is the part uſed medicinally, the juice of which, when it is freſh gathered, removes obſtructions, and cures the jaundice and dropſies, and other diſorders ariſing from the ſame cauſes; it alſo moderately promotes the periodical diſcharges. Dried, and given in powder, it anſwers the ſame purpoſes, but in a very inferior degree.

Couch Graſs.

HOWEVER offenſive this weed may be in the fields and gardens, it is ſaid to have it's uſes in medicine, and ſhould teach us that the moſt common things are not therefore deſpicable, ſince it is certain nothing was made in vain. *Couch graſs* grows to the height of two feet, and is a rude and ſtrong kind of graſs; the ſtalk is round, but pointed; the leaves graſſy yet broader than other graſs, and of a freſh green colour; the ſpike at the top reſembles an ear of wheat, only more thin and flat, containing ten rows of grains; the root is white, ſmall, extremely long, and full of joints, at every one of which it takes freſh hold, ſo that if but the leaſt piece is left in pulling it up, it grows and increaſes with amazing rapidity.

The roots are uſed medicinally, and are to be freſh taken up and boiled: the decoction is recommended in the gravel and ſtone; and though it promotes urine ſtrongly, yet it does not operate forcibly or roughly. Perſevered in for a length of time, the ſame decoction removes obſtructions of the liver, and is ſaid to cure the jaundice.

Cowſlip.

THIS pleaſing plant grows ſpontaneous in the meadows, in moſt parts of England; the leaves are broad, of an oblong ſhape, indented, rough, and of a light green colour, inclining to white; the ſtalks are round, erect, ſtrong, thick, and covered with down; they riſe from ſix to eight inches high, and are deſtitute of leaves. At the top of each is a cluſter of beautiful pale yellow flowers, each upon a ſeparate foot-ſtalk, and in a diſtinct cup.

The flowers are uſed in medicine, and were formerly celebrated as ſpecifics againſt apoplexies, palſies, and other ſudden and violent ſeiſures; at preſent, however, little confidence is placed in them, and the principal virtue attributed to them is, that given in tea, or preſerved in form of a conſerve, they have a diſpoſition to promote ſleep.

Cowſlip of Jeruſalem.

THIS plant, though not a native of Great Britain, is kept in gardens as much for the credit of it's virtues, as on account of it's beauty. It grows eight or ten inches high; the leaves are large, hairy, of a very deep green, marked with white ſpots on the upper ſurface, but of a paler green and without ſpots beneath; the ſtalks are ſlender, angular, and hairy, and bear ſmaller leaves, but of the ſame figure with thoſe which riſe immediately from the root; the flowers, which are ſmall and reddiſh, grow in cluſters at the top of the ſtalks; it has a fibrous root.

For the purpoſes of medicine, the leaves ſhould be gathered before the ſtalks grow up, and when dried, they are directed in decoction for coughs, ſhortneſs of breath, aſthmatic complaints, and all diſorders of the lungs; taken in powder, they are ſaid to ſtop the overflowing of female diſcharges; and freſh bruiſed and put into a new made wound, are reputed to ſtop the bleeding, and heal it.

Cow Wheat.

THIS plant is found wild in woods and thickets in ſeveral parts of England. It has narrow leaves, of ſo dark a green as to be almoſt black, though ſometimes they incline to purple, and bright yellow flowers; it grows to the height of eight or ten inches; the ſtalks are ſquare and ſlender, weak, brittle, and very ſeldom altogether ſtraight; the leaves are of an oblong form and narrow, broad at the baſe, and narrowing all the way to the point; and they are commonly, but not conſtantly, ſomewhat indented about the edges; the flowers hang all on one ſide of the ſtalk, in a ſort of looſe ſpike; theſe are ſmall and yellow, and grow two together; they are followed by large ſeeds, which have ſomething of the appearance of wheat, from whence the plant is named.

The ſeeds are uſed as a medicine; they are dried and given in powder, but ſmall doſes only ſhould be adminiſtered: they are ſaid to be highly cordial and ſtrengthening; but if given in too large a doſe, are apt to occaſion the head-ache and giddineſs; and inſtances have been known, of perſons who have taken this medicine imprudently, being thrown into a ſtate of ſtupefaction, and others who have ſeemed to loſe their ſenſes, and to appear as in a fit of drunkenneſs, on the recovery from which they have complained of numbneſs in their limbs, and have actually ſeemed in danger of death, though they have recovered after ſome hours without medical aſſiſtance.

The Crab Tree.

THIS beautiful tree is found commonly in hedges, where it arrives at conſiderable magnitude; the trunk is uneven, the bark rough, and of a dark colour, and the branches full of knots. The wood is hard; the leaves are broad and ſhort; the flowers are large, and at their firſt opening are of a rich and delicate purple or crimſon caſt, and ſmell agreeably; the fruit is a ſmall ſour apple.

The virtues of verjuice, which is made from the *crab*, are well known. It ſucceeds better than moſt other applications, in removing complaints which ariſe from the falling down of the uvula, and is alſo good againſt ſore throats, and in all diſorders of the mouth; externally applied, it is excellent in making poultices for ſtiff joints, and mixed with water it is uſed in all caſes of ſtrains or bruiſes.

Craneſbill.

THIS little herb is very frequently found under hedges, and in other undiſturbed places; there are a variety of kinds, but that to which the greateſt virtues are attributed, is called *herb robert.* This is a pretty plant, growing regularly; the ſtalks about a foot long, but ſeldom quite upright; they are round, branched and jointed, and are ſometimes of a red colour, as is frequently the whole plant; the leaves are of conſiderable ſize, and divided into a great number of parts, they ſtand upon footſtalks of ſome length, two at every joint; the flowers are of moderate bigneſs, and of a pleaſing red colour; they have all together a ſtriking and agreeable appearance. Theſe flowers are followed by a fruit which is long and ſlender, and having ſome reſemblance to the long beak of a bird, the name is derived from that circumſtance.

The whole plant, root, ſtalks, and leaves, is to be gathered and dried for uſe; and is recommended as ſo excellent an aſtringent, that ſcarce any plant equals it. It may be given in powder, or a decoction may be made from the dried plant; it is ſaid to ſtop overflowings of the female diſcharges, to reſtrain bloody ſtools, and to check other internal hæmorrhages.

It is remarkable that this herb, and ſome others which have the peculiar virtue to ſtop bleedings, become all over as red as blood at certain ſeaſons.

Fried in vinegar, and applied outwardly, in a poultice, for a ſore throat or quinſey, this herb is ſaid to be infallible; and ſome of the liquor mixed with honey, is an excellent gargle to be uſed at the ſame time.

Garden Creſs.

A Plant ſo univerſally uſed in ſallads, muſt be well known. In a rich ſoil, it grows two feet high; the ſtalk is round, ſtrong, and of a blueiſh green; the leaves are divided into many different parts; and the flowers are very ſmall, and perfectly white: the leaves riſing immediately from the root only, are eaten at table; theſe are large, finely divided, of a fine lively green, and ſharp; taken in conſiderable quantities, they are a remedy for the ſcurvy; the ſeeds remove obſtructions.

Water Creſs.

THIS plant is found in ſhallow rivers and ditches, in every part of Great Britain. It ſometimes grows to the height of a foot; the ſtalks are round, thick, (but in general bent and crooked) of a light green, and much branched; the leaves are alſo of a lively green, divided like wings, and obtuſe at the extremities; the flowers are ſmall and white, and grow in a kind of ſpike at the top of the ſtalks.

The leaves and early ſhoots are uſed; they may either be eaten in the manner of the garden creſs, in which way they are altogether as pleaſant, or they may be boiled, and are then excellent againſt the ſcurvy; the juice expreſſed from them poſſeſſes the ſame virtues, and operates powerfully by urine, removing obſtructions.

Sciatica Creſs.

THIS plant is only found in particular parts of the kingdom; it grows a foot high; the ſtalk is round, ſhort, and ſtraight, of a pale green colour; the leaves are ſmall, long, and of the ſame colour as the ſtalk; the flowers ſtand at the tops of the ſeveral branches into which the ſtalk divides as it riſes, theſe are white and ſmall; the leaves, which ſpring immediately from the root, are about four inches long, narrow, and finely indented at the edges; theſe are of a deep green.

The leaves are highly recommended in that diſorder which is called the ſciatica or hip-gout; they are directed to be applied externally, by way of poultice, or as an ointment beaten up with lard; in the former way, the poultice muſt be changed as it becomes dry. It appears, by it's name, to be an approved remedy, though it is but little in uſe.

Wart Creſſes, or Swines Creſſes.

A Small wild plant which grows commonly about the fields and gardens, ſpreading upon the ground; the ſtalks are five or ſix inches long, ſtrong, and ſtout, but uſually lying flat on the earth; they are very much branched, and full of leaves; thoſe leaves which riſe immediately from the root, are long and deeply divided, and thoſe on the ſtalks only differ from them in being ſmaller; they are of a deep ſhining green colour, and perfectly free from any hairineſs; the flowers are ſmall and white, and ſtand at the extremities of the branches, and between the leaves; the ſeed veſſels are ſmall, and covered with a rough coat.

This is ſaid to be an admirable diuretic, equally ſafe and powerful; it is one of the ingredients of which Mrs. Stephens's medicine is compoſed; the juice is preſcribed for the jaundice, againſt all inward obſtructions, and the ſcurvy; the leaves may either be eaten as ſallad, or dried and given in decoction.

Croſs Wort.

THIS, though a wild plant in England, is not very common. It riſes to the height of a foot and a half; the ſtalks are ſquare, hairy, feeble, and of a paliſh green; the leaves are broad and ſhort, and ſtand four at every joint, placed in a regular ſtar-faſhion upon the ſtalk; the flowers are ſmall and yellow, growing in cluſters round the ſtalk, at the joints, and ſpringing from the inſertion of the leaves. It is found in dry places.

The whole plant being gathered when it begins to flower, and dried, is preſcribed in a ſtrong decoction as a good reſtringent and ſtyptic; it is ſaid to ſtop purgings, even when there are bloody ſtools, and overflowings of the periodical evacuations of blood.

Crow Foot.

THERE are many ſorts of this common wild plant, but the kind uſed medicinally is that moſt common in meadows, and diſtinguiſhed by the name of the *common creeping crow foot.* It ſeldom grows much more than a foot high, the ſtalks are ſtrong, thick, branched, and of a paliſh green, but they are not often quite ſtraight; it has but few leaves on the ſtalks, but they are finely divided; the flowers are about the ſize of a ſhilling, and of a fine ſhining yellow colour; they grow at the tops of all the branches; thoſe leaves which riſe from the root are larger than thoſe on the ſtalks, and ſometimes divided into only three parts; they are frequently ſpotted with white.

This plant is cauſtic, and poiſonous; yet it is ſometimes imprudently mixed with ſallad, in which caſe it may be productive of danger. The leaves are ſaid to be excellent, applied externally, in palſies and apoplexies; acting quicker than cantharides in raiſing bliſters, and are more ſenſibly felt. It is aſtoniſhing that a medicine ſo eaſily had, and ſo efficacious, is not more commonly uſed for this purpoſe! But perhaps this quality is not generally known.

There are two other kinds of crow-foot, both known as poiſons, a character to which indeed that which we have deſcribed is intitled: the two moſt pernicious kinds are that called ſpearwort, which has long and narrow leaves, but undivided; and one with very ſmall flowers and leaves, broad and indented. Both theſe laſt mentioned ſorts grow in watery places.

The Cucumber Plant.

THIS plant is ſo well known as to require little deſcription; the ſtalks are a yard or two in length, thick, but ſpreading upon the ground, angular and hairy; the leaves are broad and of handſome appearance, deeply indented, very rough, and of a full green colour with a bluiſh caſt; the flowers are large and yellow; the fruit long and thick; the ſeeds only are uſed in medicine, and to have theſe in perfection, the fruit ſhould be ſuffered to remain on the plant till they are very ripe, before they are gathered. The ſeeds are cooling and diuretic, and are uſeful in ſtranguries, and all diſorders of the urinary paſſages; they are beſt adminiſtered beaten up into an emulſion with barley-water.

Cuckow Flower, or Ladies Smock.

THIS beautiful wild plant adorns the meadows of various parts of the kingdom, in the ſpring months; it grows to the height of a foot; the leaves, which riſe immediately from the root, are regularly and beautifully winged, and ſpread in a circular form; the ſtalk is round, thick, ſtrong, and erect; the leaves which grow on it are ſmaller than the others, finely divided, and ſtand ſingly; a ſpike riſes, on the tops of which the flowers grow in little cluſters, and ſome from the bottom of the leaves; they are of a large ſize and a fine white, ſometimes elegantly tinged with a bluſh of red.

The juice of the freſh leaves is uſed as a diuretic; and, acting in that way, is good in the gravel, jaundice, and green ſickneſs; a courſe of it has ſucceeded in curing the ſcurvy.

Cudweed.

THERE are many ſpecies of this common wild plant, but that uſed in medicine is called the *middle cudweed,* or *herb impious*; it has this laſt ſtrange appellation, from an obſervation that the young flowers riſe above the old ones, which was formerly termed the ſon's getting above his father. This cudweed is a ſmall low plant, ſeldom riſing a foot high; the ſtalks are white, tough, ſtrong, and upright, though ſlender; they are very thick ſet with ſmall, oblong, white, and pointed leaves, which do not often lie very even; the flowers conſiſt of a ſort of brown or yellowiſh head growing at the tops, and in the diviſions of the ſtalks.

This herb is ſaid to ſtop bleeding, if it is bruiſed and applied to a new wound; dried, and given in decoction, it is preſcribed againſt the whites, and to ſtop violent purgings; a water diſtilled from this plant was formerly recommended for the early ſtages of cancers, being applied by wetting linen rags with it; a decoction of it is alſo directed in quinſies.

The Black Currant.

THIS ſhrub is univerſally known, and to be found in every garden; it ſometimes grows four or five feet high; the branches are weak, and the bark is ſmooth; the leaves are larger and broader than the red currant, but are divided in the ſame manner; they emit a very ſtrong and ſomewhat offenſive ſmell.

The bloſſoms reſemble thoſe of the red and white currant, being greeniſh and hollow; the fruit is a large round berry, black, and of a taſte rather diſagreeable to ſome palates; it grows in bunches like other currants, but more diſtant on the ſtalks.

The juice of *black currants* boiled with ſugar to a jelly, is an excellent remedy againſt ſore throats, or it may be brought to ſuch a conſiſtence, without ſugar, as to make an admirable lozenge; the jelly of black currants, with a mixture of warm water, makes an incomparable gargle, and theſe currants, as well as the red and white, are cooling, cleanſing, and opening.

Long Cyperus.

THIS plant grows wild in marſhes, fens, and other damp places, in various parts of England; it ſeldom exceeds eighteen inches in height; the leaves are upwards of a foot long, flat and narrow like graſs, of a lively green colour, and ſharp at the ends; the ſtalk is triangular and green, and bears no leaves, except two or three ſmall ones at the top, from which riſe ſeveral ſmall tufts or ſpikes of flowers; theſe are of a brown colour, light, chaffy, and in all reſpects like thoſe of the other graſſes which are found in waters or watery places. Of this plant the root only is uſed; it is long and of a dark colour, and when dried is pleaſantly ſcented, and of an aromatic warm taſte; it ſhould be taken up in ſpring, and is recommended to relieve pains in the head, and operates by urine.

The Cypreſs Tree.

THIS tree, though not a native, is preſerved in the gardens of Great Britain; it is an evergreen of ſingular growth; it reaches to the height of twenty or thirty feet, and is beſet thick with branches, almoſt from the ground; theſe branches are largeſt towards the bottom, and ſmaller by degrees towards the top, ſo that the tree forms a natural cone; the bark is brown inclinable to red; the leaves ſmall and ſhort, covering all the twigs like ſcales, and of a beautiful deep green; the flowers are inconſiderable in ſize, and of no great beauty; they are ſucceeded by a kind of nut of the ſize of a ſmall walnut, and nearly the colour of the bark; theſe are of a hard ſubſtance, and the fruit, when ripe, divides into ſeveral parts, and admits the ſeeds to fall out.

The fruit is the part uſed in medicine; it ſhould be gathered before it burſts, and being carefully dried may be given in powder, in doſes of five and twenty grains each, or leſs, according to circumſtances. It is reputed to be balſamic and ſtyptic, ſtopping bleeding of the noſe and ſpitting of blood, bloody-flux, and overflowing of the female diſcharges; for theſe purpoſes it is ſaid to be ſcarce equalled by any remedy of the vegetable kind.

Common Daffodil.

THIS is an Engliſh plant, and grows wild in almoſt every undiſturbed place; it has narrow leaves, and large yellow flowers; but beſides theſe wild flowers, there are many found in our gardens in a great variety of ſhapes, which it has acquired by culture. In the wild ſtate it is about twelve inches high; the leaves are long and narrow like graſs, of a deep green, and nearly as tall as the ſtalk, which is roundiſh, but ſomewhat flatted and indented at the edge; the flower is large and ſingle, ſtanding at the top of the ſtalk, and by it's weight preſſing it ſomewhat down; the root is round and white, and this is the part which is to be uſed medicinally, and as it's virtues are loſt by keeping, it is always prudent, and attended ed with little trouble, to have it in readineſs in a garden. Given internally in a ſmall quantity it acts as an emetic, and afterwards purges gently; and it is ſaid to be excellent in removing obſtructions. The beſt form of adminiſtering it, is in the juice preſſed out and mixed with white wine, but it is principally uſed externally.

The freſh roots are bruiſed and applied to green wounds, which it is ſaid to heal very ſuddenly; it is alſo ſucceſsfully applied to ſtrains and bruiſes, taking away the ſwelling and relieving the pain.

The Great Daiſy.

THIS is a wild plant, which is too common in our fields, to be much eſteemed in gardens; it ſometimes riſes above a foot high; the ſtalks are angular, firm, and upright, though they are but ſlender; the leaves are of an oblong form, narrow, indented round the edges, and of a fine dark green; the flowers, which ſtand on the tops of the branches, are white, and about an inch broad, reſembling very much the white China ſtar-wort, a plant cultivated in our gardens; the root is ſmall.

The flowers only are uſed in medicine; they muſt be gathered as ſoon as they blow, and dried, and may be afterwards adminiſtered either in powder or infuſion; they are preſcribed as a remedy for coughs and ſhortneſs of breath, and diſorders of the lungs; their qualities are balſamic and ſtrengthening.

The Little Daiſy.

THIS plant needs as little deſcription as the former; the leaves are oblong, wide, and obtuſe; the ſtalks ſeldom exceed three or four inches in height, and are without leaves; the flowers grow ſingly, one on each ſtalk, are of the breadth of a ſhilling, and whitiſh or reddiſh; the root is compoſed of a vaſt number of fibres.

The roots, freſh gathered, are given in a ſtrong decoction, and are ſaid to be excellent againſt the ſcurvy; the uſe of them muſt be perſevered in ſome time, but the event generally rewards the patience of the ſick.

An idle notion formerly prevailed, that theſe roots, boiled in milk, keep puppies from growing large, but it is certain they produce no ſuch effect.

Dandelion.

THIS alſo is a wild plant too common to require deſcription; the leaves are long, broad, and deeply indented at the edges; the ſtalks are without leaves, hollow, green, erect, and from ſix to ten inches high; on each ſtalk ſtands one flower, which is large, yellow, and compoſed of a great number of leaves, and the ſeeds which ſucceed it have a downy matter affixed to them. In the ſeed ſtate the whole head appears globular; the root is long, large, and white within; every part of the plant is full of a milky juice, but moſt of all the root, from which, when it is broken, it flows plentifully, and is bitteriſh, but not diſagreeable to the taſte.

A decoction is made from the root, freſh gathered, which promotes urine, and brings away gravel; the leaves are ſometimes eaten as ſallad when very young, and in ſome parts of the continent they are blanched like celery for this purpoſe; taken this way, in ſufficient quantity, they are a remedy for the ſcurvy.

Red Darnel.

THIS wild graſs grows very common about road ſides, and is diſtinguiſhed by ſtubborn ſtalks and low growth, ſeldom exceeding a foot in height, but often much leſs; the leaves are narrow, ſhort, and of a dull green; the ſtalk is ſtrong, rather flat, erect, and of a reddiſh colour; the ear is alſo flat, and compoſed of a double row of ſhort ſpikes; the colour of the ear is inclinable to purple; the root is compoſed of a great number of whitiſh fibres.

The roots dried and given in powder, are repreſented as making a very excellent aſtringent medicine, of uſe in violent purgings, overflowing of the periodical evacuations, and all other fluxes and bleedings; but the operation of it is ſlow, and perſeverance is required; it is, therefore, more proper to be adminiſtered for habitual complaints of this kind, than for ſuch as are brought on by any ſudden illneſs.

There is another kind of *darnel* with white flowers, concerning which an old opinion prevailed, that the ſeeds of it, when by chance mixed with corn, and made into bread, occaſion dizzineſs of the head, ſickneſs of the ſtomach, and produce all the bad effects of drunkenneſs; but this apprehenſion does not appear to be well founded. This is a taller plant, and more common in corn-fields than the red.

Devil's Bit.

THIS plant is frequently found wild in meadow grounds, and has ſlender ſtalks, and flowers of a globular form. It grows two feet high; the ſtalks are round, ſtrong, and ſtraight, and are divided into many branches, they have alſo many joints, at each of which grow two little leaves; the flowers are in tufts as big as a ſmall walnut, compoſed of many leſſer ones, their colour is a very ſtrong and beautiful blue or purple; the leaves which grow from the root, are not above four inches long and one broad, obtuſe, of a duſky green colour, and a little hairy, but not divided, or even indented at the edges; the roots are white within, and compoſed of many fibres, and a thick head, which terminates abruptly, as if it had been bitten or broken off. The monks aſſerted that the devil bit it away, envying mankind it's virtues.

The leaves gathered before the ſtalks appear, and made into a decoction, are ſaid to relieve coughs, and diſorders of the lungs; the root dried and given in powder, promotes perſpiration, and was formerly eſteemed a good medicine in contagious fevers, bites and poiſons of venomous reptiles, wind, worms, wounds, and many other diſorders, but it is not at preſent much uſed.

Dill.

THIS plant was formerly kept in our gardens for the uſe of the kitchen. The ſtalk is round, ribbed, hollow, erect, and riſes to the height of three feet, and is divided into a great number of branches; the leaves are alſo divided into numerous narrow and long parts, very much reſembling fennel, but not ſo large; the flowers are ſmall, and of a yellow colour, they ſtand in cluſters on the tops of the branches; the root is ſmall, and ſomewhat woody; the ſeeds of *dill* are preſcribed as a remedy for wind and colical complaints; they were alſo formerly ſaid to be ſpecific againſt the hiccough, but this ſeems to be rather doubtful.

Dittander.

THOUGH this herb grows wild in ſome places, it is more frequently met with in gardens. It is a tall plant, with broad leaves and ſmall white flowers; the ſtalks are round, ſtrong, of a light green, and very much branched; it ſometimes reaches the height of three feet; the leaves are large toward the bottom, but are ſmaller as the ſtem riſes, and the flowers ſtand in a kind of looſe ſpikes; the lower leaves are elegantly indented, though the others are ſcarce perceivably marked. The ſeeds are contained in ſmall round pods, and are hot and pungent to the taſte. From the freſh leaves of *dittander*, boiled in water, a decoction is made, which operates by urine, and promotes female diſcharges, as well the periodical as thoſe after delivery.

Dittany of Crete.

THOUGH this little plant is a native of the eaſt, it is kept in ſome of the gardens of the curious in this country, but rather on account of it's beauty than for the merit of thoſe virtues which were formerly aſcribed to it. It grows to the height of ſix or eight inches; the ſtalks are jointed, ſquare, hard, ſomewhat woody, but ſlender, and branched; the leaves, which ſtand two at each joint, are ſhort, broad and round, and are covered with a white downy matter; the flowers are ſmall, and of a purple colour, growing in an oblong ſhape, and bearing ſlender ſcaly heads, reſembling thoſe of marjoram: theſe heads conſtitute a conſiderable part of the beauty of the plant, being variegated with green and purple. The whole plant emits a moſt agreeable ſmell.

The leaves are ſtill kept dried in the druggiſts ſhops, though it is not at preſent in any great degree of reputation for the cure of wounds, a quality attributed to it by the ancients; nor is it at this time often uſed alone: it is, however, ſaid to be uſeful in nervous diſorders, to promote the periodical diſcharges, and to ſtrengthen the ſtomach.

White Dittany.

THIS, like the former, is a native of the warmer parts of Europe, but is kept in the gardens here; it riſes to the height of three feet, is very much branched, and extremely beautiful; the ſtalks are round, large, ſtrong, and of a green colour, ſometimes inclining to purple; the leaves, which ſtand on them without any regular order, reſemble thoſe of the aſh tree, but are ſomewhat ſmaller. The flowers are of conſiderable ſize, and elegant; they are either of a faint red, white, or ſtriped, and ſtand in ſpikes at the extremities of the branches. In the warm ſeaſon, the whole plant is covered with a kind of balſam, glutinous to the touch, and extremely fragrant to the ſmell; and this is of a nature ſo inflammable, that if a candle is applied to any part of the plant, it takes fire, communicates inſtantaneouſly to the whole ſurface of it, and goes off in a flaſh like lightning; and what renders this phænomenon the more extraordinary is, that it does not appear to injure the plant, but may be repeated after three or four days, a new covering of the balſam being produced in that time. The roots of this plant are medicinally uſed; they are recommended in fevers, and in nervous and hyſteric complaints; but they do not appear to be very efficacious. An infuſion of the tops of the plant is ſaid to be a pleaſant and uſeful medicine in the gravel, working powerfully by urine, and relieving thoſe colic pains which commonly accompany that diſorder.

Sharp-pointed Dock.

THIS plant is chiefly diſtinguiſhed from the ordinary dock, by being raher more handſome; and by the figure of it's leaves, which are ſharp-pointed, inſtead of being obtuſe, and are alſo ſomewhat narrower and longer; it grows three feet or more high; the ſtalks are upright, round, ribbed, and branched, and of a green colour; the leaves are of of a more lively green, ſmooth, and neither wrinkled on the ſurface, nor curled at the edges; they have peculiarly large ribs; the flowers are but ſmall; at firſt they are greeniſh, then grow paler, and as they dry, become brown. The root is long and large, and of a tawny colour.

The root is uſed in medicine, and is preſcribed as a remedy for the ſcurvy, and for ſweetening the blood; for which purpoſe it ſhould be given in diet drinks, and decoctions; and in this way it is ſaid to produce wonderful changes in bad habits. Externally applied, it has the reputation of curing the itch, and other foulneſſes of the ſkin; the leaves and ſtalks ſhould be beat up with lard for outward uſe.

Great Water-Dock.

ALL the ſeveral plants of the dock kind have a general reſemblance; and this is the largeſt of all, and moſt like the laſt deſcribed, in it's manner of growth, though vaſtly ſuperior in ſize; it grows commonly about waters, and reaches to the height of five or ſix feet; the ſtalks are round, thick, ribbed, and very ſtraight, ſomewhat branched, and hollow. The leaves are of great bigneſs, of a pale green colour, ſmooth and ſharp at the points. The flowers are ſmall, and of a very indifferent appearance, being at firſt of a greeniſh colour, with ſome white threads, and afterwards becoming brown. The root is large, long, and of a brown colour, inclining to red.

This plant has of late years been highly extolled as a remedy for the ſcurvy, the root contains the virtues, and it is to be given in decoction or infuſion, though the latter is the preferable way. The ſeeds of this, as well as the other docks, are aſtringent, and good to reſtrain violent purgings. A late botaniſt extracted an eſſence from the root of the greater water-dock, which he ſold as a ſpecific in ſcorbutic diſorders.

Garden Dock, or Monk's Rhubarb.

THIS plant of the dock kind is a native of Italy, but is preſerved in our gardens for medicinal uſes. It grows exceedingly tall, ſometimes ſix or ſeven feet high; the ſtalk is round, thick, erect, and ſtrong; the leaves are of a very conſiderable ſize, both in length and breadth, and are pointed at the extremities: they ſtand upon ſtrong hollow footſtalks; and the great ſtalk of the plant is frequently red. The flowers, like thoſe of the other docks, are greeniſh and white at firſt, and afterwards turn brown; but they are in general not ſo ſmall as thoſe of the other kinds. The root is proportionably large and long, and is divided into ſeveral parts; the bark is of a browniſh yellow, and within it is of a more full yellow mixed with red, and this is the part uſed. It has received the name of *monk's rhubarb* from an idea of it's poſſeſſing ſome of the virtues of the true rhubarb; but if it does, it is only in a very ſlight degree, being very little purgative, and ſtill leſs aſtringent; it works rather more by urine than by ſtool, and is recommended in the jaundice, and other diſorders occaſioned by obſtructions.

The plant of the dock kind, which is kept in gardens, and called *baſtard rhubarb*, is ſometimes miſtaken for this, but the leaves of it are more round; if it has the ſame virtues with the monk's rhubarb, it's efficacy is ſo very inferior, even to that plant, that it cannot be uſed inſtead of it without injury.

Dodder.

THIS ſingular plant, is found in many parts of England, and particularly the weſtern counties. It conſiſts of only ſtalks and flowers, for it has no leaves, nor any growth which at all reſembles them.

The ſtalks are extended to the length of a foot or two, faſtening themſelves to other plants; theſe ſtalks are of a purpliſh colour, not larger than a ſmall packthread, but more tough and ſtrong than could be expected from their ſize; theſe are ſo twiſted about the branches of the plants, and entangled with each other, that it is hardly poſſible to trace them to their ſources. The flowers grow in little tufts or heads, and are ſmall and of a reddiſh colour, each flower is ſucceeded by four little ſeeds.

As a purge *dodder* ſhould be uſed freſh gathered; it may be boiled in water, with a ſmall quantity of ginger and all-ſpice, and the decoction works ſmartly by ſtool; it is ſaid to open obſtructions of the liver, and other inteſtines, and to be a remedy in the jaundice, and other diſorders ariſing from the ſame cauſes.

There is a dodder imported from abroad, which is ſuppoſed to grow upon the garden thyme, which was formerly preferred to the others, and was ſuppoſed to derive peculiar virtues from the plant on which it grows; but this is mere imagination, and experience has ſhewn that it acts only as a purge, like the other, but weaker; and therefore the common dodder is preferable to it in England, becauſe it can be gathered freſh; the other we only have dry, and it frequently loſes a great deal of it's virtue by laying long in the hands of the druggiſt.

Dog Mercury.

THIS herb is extremely common, but it is a poiſon and not a medicine, and we deſcribe it, leaſt it ſhould be gathered and fatally uſed inſtead of ſome ſalutary plant. It grows commonly under hedges, and in the ſpring of the year makes a pretty appearance; and as it's aſpect is by no means diſagreeable, without ſome caution ignorant people might very naturally be tempted to eat of it among other ſpring herbs, nor have botanical authors in general taken ſuch notice of this plant as the dangerous qualities it poſſeſſes ſeem to require, we ſhall therefore be more minute in our account of it, that no perſon may be at a loſs to diſcover it.

Dog Mercury grows about a foot high, and has only a few very large leaves; the ſtalk is round, ſtrong, whitiſh, and ſomewhat hairy; the leaves grow chiefly toward the top, and ſeldom exceed in number four, five, or ſix; they are long and proportionably broad, ſharp at the points, notched about the edges, and, like the ſtalks, ſomewhat hairy. The flowers are inconſiderable, ſtanding in ſpikes at the extremities of the ſtalks, and the ſeeds grow on ſeparate plants, and are double and roundiſh; from this circumſtance the herb has been divided into two kinds, male and female, but theſe diſtinctions of the ſex were formerly applied wrong; thoſe which bear the flowers are unqueſtionably the male plants, the others which produce the ſeeds the female.

No plant or herb found in Great Britain, is more fatal than this of which we now treat. Many unfortunate perſons have been deſtroyed by eating it boiled accidentally with other herbs, and probably many others have ſuffered in the ſame way, without the cauſe being diſcovered.

Among all the writers on Britiſh plants, one only gives an account of it as a poiſon, and ſufficiently warns all who read him, from the uſe of this herb; but the book in which this is mentioned, is written in Latin; and thoſe to whom the information would be moſt uſeful cannot read it: other writers mention it in common with other mercuries; which, as ſome of them are eatable, may be productive of very melancholy conſequences.

Dog Tooth.

THIS pretty little plant is a native of Italy, and grows wild alſo in ſome parts of Germany; with us it is only preſerved in gardens; it has two broad leaves, and a large drooping flower; it is not above five or ſix inches high; the ſtalk round, ſlender, feeble, and greeniſh towards the top, though it is ſometimes white at the bottom; the leaves ſtand a little above the ground, are of an oblong ſhape, rather broad, of a pleaſing green, not indented at the edges, and blunt at the ends; by theſe leaves the ſtalk is incloſed at the foot; the flower is large and white, ſomewhat tinged with red; it droops, and is long, hollow, and very beautiful; the root is round, has a few fibres growing from it's bottom, and is full of a ſlimy juice.

The roots, freſh gathered, are uſed medicinally; but they will not bear keeping, generally loſing their virtues by drying; they are recommended as a remedy for the worms in children, and are ſaid to have a wonderful and ſpeedy effect in relieving thoſe violent pains in the belly, which are occaſioned by theſe diſagreeable gueſts; the expreſſed juice is the form in which it is directed to be given, or if the little patients cannot be prevailed on to take it in this way, the roots may be boiled in milk, to which they give very little taſte; as it operates powerfully, and ſmall doſes will take effect, eſpecially of the juice, it is beſt to begin with a very ſmall quantity, and as that agrees, to increaſe it in ſuch a way as the ſtrength and ſtomach will bear.

Dragons.

THIS is a large and handſome plant, and is kept in gardens as well for it's medicinal virtues, as for it's beauty; it ſometimes reaches the height of four feet; the ſtalk is ſubſtantial, round and hard, perfectly ſmooth, and marked on the ſurface with a variety of colours, ſuch as purple, white, and green. The leaves are of a very large ſize, ſtanding on long foot-ſtalks: they are of a dark and full green, and each leaf is divided into ſeveral portions, like the diſtribution of the hand into fingers: the flower is like that of the cuckow pint, and is contained in a hollow caſe, green without, and of a deep purple within; after this flower falls, large red berries appear in cluſters. The whole plant is of an acrid and intolerable taſte.

The roots, ſtems, leaves, and flowers of this plant, may be gathered and dried; after which it may be made into a powder, adminiſtered in decoction. It was formerly much eſteemed in malignant fevers, and the ſmall pox; but it retains at preſent very little of it's credit, and is only uſed in ſome compoſitions.

Drop Wort.

THIS plant, which grows wild, is about two feet high, and bears tufts of whitiſh flowers, and leaves finely divided. The ſtalk is round, ſtrong, erect, ribbed and branched. The leaves are large, and divided into numerous parts; they riſe principally from the root, ſtanding on ſlender foot-ſtalks; the ſtalks have but few leaves, and thoſe are ſmall: the flowers are diſtinctly of inconſiderable ſize, but they ſtand in large tufts at the extremity of the branches. They are white within, and often but not always reddiſh on the outſide; the ſeeds are flat, and grow ſeveral together; the root, which is the part moſt uſed in medicine, is compoſed of a great number of ſmall lumps, faſtened together by fibres; it is recommended in fits of the gravel and ſtone, promoting the diſcharge of urine with effect and ſafety; for this purpoſe the juice is to be given, or a ſtrong decoction may be made of the freſh root. It may be given dried and powdered to reſtrain the whites and purgings, being equally gentle and ſafe as an aſtringent.

But there are alſo ſeveral other plants diſtinguiſhed by the names of *drop-worts*, which poſſeſs very different qualities; and one of them, which is the hemlock dropwort, is ſaid to be poiſonous in a very high degree; but the right kind is ſufficiently different from the others not to be miſtaken by perſons of any knowledge or attention. The flower of this conſiſts of ſix little leaves, and it has many yellow threads in the middle; the flowers of all the other ſorts are compoſed of only five leaves each. The flowers of the right ſort grow in cluſters, cloſe together; thoſe of the other ſorts are more diſtinct.

Duck Weed.

THIS herb is univerſally known, conſiſting of ſmall, round, ſingle leaves, which lie floating upon the ſurface of the water, from which alſo the roots derive their nouriſhment, hanging ſuſpended in that element, without ſticking into the mud at the bottom or ſides; with this ſmall green herb almoſt all our ſtanding waters are covered in the ſummer; but there are three kinds of it: that which we now deſcribe; another with ſmaller leaves, from each of which ſhoot many fibres; and a third kind with larger leaves, of a purpliſh colour beneath; but as all theſe ſorts poſſeſs the ſame virtues, it is indifferent which is taken. The juice expreſſed from the leaves, and continued for ſeveral days, is ſaid to work powerfully by urine, and to remove obſtructions of the liver, on which account it has been given in the jaundice with great ſucceſs.

Dwarf Elder.

THIS ſhrub ſo much reſembles the common elder tree, that it may be eaſily miſtaken for it, without careful examination; contrary, however, to that tree, it ſeldom grows above four or five feet high; the ſtalks are green, round, brittle and ſtraight, and have much the appearance of the young ſhoots of elder; but this plant has no woody part from whence they ſpring; the leaves are large, and conſiſt of ſeveral pairs of others like thoſe of elder, with a ſingle one at the end; but the leaves of this plant are longer than thoſe of the elder, and are lightly indented round the edges. The flowers are white, and of a ſmall ſize; but they ſtand in very large cluſters as thoſe of the elder; they are ſucceeded by berries, which turn black when they are permitted to ripen: but this ſeldom happens, the birds being ſo immoderately fond of them, that they devour them the moment they come to maturity. The root is white and creeping, and ſurvives the winter, but the ſtem and leaves die every year to the ground.

It is not very commonly found wild in England, though a great quantity of it formerly grew at the back of Cuper's Gardens, and perhaps may be ſtill found about that neighbourhood. The juice of the leaves and ſtalks works ſtrongly both by ſtool and urine, and in this way is ſaid to have cured dropſies. Some dry the plant, and uſe it in decoction, but it is leſs efficacious.

Dyers Weed.

THIS weed grows on dry banks and upon walls, and may be known at firſt ſight by it's ſtraight ſtalks, and very long ſpikes of ſmall yellow or greeniſh flowers; it riſes to four feet or more in height; the ſtalk is large, ſtrong, channelled, and moſtly covered with leaves, which do not bear proportion in ſize to the bigneſs of the plant, but are oblong in ſhape, and grow narrow and pointed at the ends; theſe are alſo of a yellowiſh green colour, and not indented at the edges; the bottom of the ſtalk is ſurrounded by a ring of the ſame kind of leaves, but larger; the root is long, and white within.

The only virtue that ſeems to be attributed to this plant, is in the removal of the king's evil; for this diſorder the flowery tops are directed to be dried, and given in a decoction; but it is extremely doubtful whether it has ever proved a ſucceſsful remedy.

Elder.

THIS ſhrub or tree is well known. It is of irregular growth; the ſtem or trunk is covered with a rough whitiſh bark, and the wood is firm, but hollow within and full of pith, but this is leſs perceivable in the largeſt parts of the ſhrub, though it is never quite filled up; the young ſhoots are long, of conſiderable ſize, and green; they are of quick growth, and frequently do not begin to change colour or grow woody till they are a yard in length, the quantity of pith then leſſens, their bark as they ſtand becomes browniſh, and their under ſurface woody; the leaves are compoſed of ſeveral pairs of ſmall ones, with a ſingle or odd leaf at the end; the flowers ſtand in vaſt cluſters, rather looſe and open, and each diſtinct bloſſom is ſmall and white; they are ſucceeded by berries, which grow black as they ripen, and are full of a purple juice. There is another kind of elder, with berries which are white when they are ripe, and which differs but little in other reſpects from this with black fruit; and a third ſort with jagged leaves, but no otherwiſe different.

Many medical virtues are aſcribed to the elder. The inner bark of it is a ſtrong purge, and it is reputed to cure dropſies when taken in time, frequently repeated, and long perſevered in; a cooling ointment is made by boiling the flowers in lard till they are criſp, and then ſtraining it off; the juice of the berries boiled down with ſugar, or without, till it comes to the conſiſtence of honey, is the celebrated *rob of elder*, highly extolled in colds and ſore throats, though of late years it ſeems to have yielded to the preparations of black currants. Wine is made of elder berries which ſomewhat reſemble Frontiniac in flavour.

Elecampane.

THIS is a tall ſtout plant, growing wild in ſome parts of England, but generally kept in gardens for medicinal purpoſes; it grows four or five feet high, and the flower is of conſiderable ſize and a yellow colour; the ſtalk is round, large, and erect, very ſtrong, and of a reddiſh caſt; the leaves are long, proportionably broad and rough, they are pointed at the ends, and of a light green colour; the flowers grow at the extremities of the branches, and in ſome reſpects reſemble the double ſunflower; they are ſometimes ſo large as to be near two inches in diameter, and are elegantly formed and of a fine yellow colour; the root is long and large, brown on the outſide, and white when it is cut or broken.

The root is uſed medicinally, and poſſeſſes moſt virtue when it is taken freſh out of the garden, though the dried roots imported from Germany are generally adminiſtered. It is the opinion of ſome writers, that few plants are more ſerviceable than this, which relieves diſorders of the breaſt and lungs, opens obſtructions, operates powerfully by urine, and ſtill more by perſpiration; the juice of it is ſaid to be a cure for the itch, applied externally. It is, however, generally preſcribed as a remedy for coughs, for which purpoſe it is to be taken candied; and in this way a ſmall piece of it may be held almoſt perpetually in the mouth, and the juice ſwallowed gently, which will in general anſwer better than larger doſes ſwallowed at once.

Elm.

AN Engliſh timber tree which grows to a very great magnitude, and is found in rich and fertile ſoils throughout the kingdom; the bark is brown, rough, and of an irregular ſurface; the twigs are alſo of the ſame colour, and very tough; the leaves are ſmall, but broad and ſhort in proportion to their bigneſs, rough to the touch, and finely indented round the edges; they terminate in a point. The flowers are ſcarce obſerved, they appear before the leaves, and for the moſt part towards the tops of the trees; and they are only a kind of threads; the ſeeds are flattiſh.

The inner bark of this tree, boiled in water, is ſaid to make a better gargle for a ſore throat than almoſt any other that can be preſcribed: it muſt be ſweetened with honey of roſes; and it is extremely ſoft and healing, notwithſtanding it's very cleanſing qualities.

Two or three other kinds of *elms* may be found in garden hedges, which have been imported from other countries; but the bark of the Engliſh rough elm which we have deſcribed, is to be preferred to all of them as a medicine.

Endive.

THIS ſallad herb is univerſally known; it riſes two feet high, and bears blue flowers; as it is brought to the table, it is curled and blanched, and looks beautifully. There are two ſorts of *endive*, one with narrow, and the other with broader leaves; and both are cultivated for the kitchen, but the former is moſt common; of this the leaves are long and narrow, blunt at the ends, and deeply indented, or rather divided at the edges, and of a yellowiſh colour, inclining to green; the ſtalks are round and ſtrong, and the leaves that grow on them, reſemble thoſe from the root, but are inferior in ſize. The flowers ſtand at the extremities of the ſtalks and branches; they are of a fine blue colour, and in ſhape and ſtructure like the dandelion: they are extremely elegant.

It is aſſerted, that the juice of endive may be taken with great advantage as a medicine in many caſes, cooling the ſtomach, and operating very powerfully in removing obſtructions in any of the inteſtines. It is of courſe a remedy for the jaundice; and if it be perſevered in for a length of time, is ſaid to cure the ſcurvy.

Eringo.

THIS plant grows wild by the ſea-ſide on moſt of the coaſts of England, and it's virtues have given it a place in the gardens. It is as prickly as a thiſtle, and the whole plant appears of a whitiſh green; the ſtalk is ſtrong, woody, round, channelled, and ſubſtantial; not very ſtraight, but branched and ſpreading irregularly. The leaves, which are of a pale green, with a bluiſh caſt, approaching to white, are ſmall but broad, of an oblong ſhape, notched and prickly. The flowers grow in heads at the extremities of the ſtalks; and immediately under them is a circle of ſmall leaves; the flowers diſtinctly are ſmall, and of a pale green, almoſt white; but collected in the head, appear tolerably large. The root is long, ſmall, and of an agreeable taſte.

The root of this plant candied with ſugar, is recommended to eaſe violent coughs, and to reſtore weakeneſſes of all kinds. It is alſo ſaid to poſſeſs many virtues as a diuretic, and to be excellent in the jaundice: for the laſt purpoſe a decoction ſhould be made from the freſh root; and this preparation of the root is alſo preſcribed in ſtranguries, and other complaints, which originate in the kidneys; nor are the effects of theſe roots leſs valuable as a balſamic than as a diuretic, being given in conſumptive caſes with great ſucceſs.

Eyebright.

THIS is a low herb, which grows commonly in the meadows in different parts of Great Britain; it has woody ſtalks, and variegated flowers; it's height does not exceed ſix or eight inches; the ſtalks are round, ſtrong, ſubſtantial, and very hard; the leaves are broad, thin, and very deeply indented at the edges; and of a bright ſhining green; the flowers are ſmall and very bright, the ground of them is white, and they are ſtreaked and ſpotted with black, or a very dark hair colour.

This plant has been celebrated for helping dimneſs of ſight; for this purpoſe it has been directed to be taken internally, either the leaf dried and powdered, or freſh in decoction or tea; the juice of the leaves, or a water diſtilled from them, are alſo recommended as external applications when the eyes are inflamed; but it has loſt much of it's ancient reputation, it is however allowed to be an excellent diuretic.

Fennel.

FENNEL is ſo univerſally uſed in the kitchen, that it does not require much deſcription, though it may be proper to notice it, as it is ſaid to poſſeſs ſome medicinal virtues. It ſometimes riſes to the height of ſix or ſeven feet; the ſtalk is round, hollow, and of a dark green colour; the leaves are large, but they are divided into a vaſt number of fine and ſlender parts, which are alſo of a deep green colour, inclining to blue; the flowers, which ſtand at the top of the branches, are ſmall and of a yellow colour, but they grow in large cluſters; the ſeed is ſmall, of a dark colour, and channelled or ribbed, and the taſte is acrid and aromatic; it has a long and white root, and this is the part uſed medicinally. Boiled in common water, and given in large quantities, it is ſaid to work by urine, and to be a remedy for the gravel, ſtone, and jaundice. It was formerly highly eſteemed for diſorders of the eyes, and was uſed for theſe complaints both externally and internally; and in the latter way it was conſidered as a ſtrengthener and reſtorative.

Sweet Fennel.

THIS plant, which is only found in gardens, reſembles very much the common kind, but is of a paler colour. It grows to the height of four feet; the ſtalk is round, hollow, channelled or ribbed, erect and branched; the leaves are large, divided into a great number of parts, in the ſame manner as thoſe of common fennel, and both the leaves and ſtalks are of a pale green, with a yellowiſh caſt, and not of ſo dark a colour as the other kind. The flowers are alſo yellow, and ſtand in ſmall cluſters; two ſeeds follow after each flower, but theſe differ from thoſe of the common fennel in ſize, ſhape, colour, and taſte, being long, ſlender, of a paler colour, ſomewhat crooked and deeply furrowed, and their taſte ſweetiſh and rather acrid.

Of the ſweet fennel, the ſeeds are the only part uſed; they are ſaid to be excellent in the colic, and are uſed externally with ſucceſs in poultices to diſperſe and reduce ſwellings.

Fennel Flower.

THE flower of this name, kept in gardens, has no other reſemblance to the fennels, juſt deſcribed than the ſtructure of the leaves. It grows a foot or eighteen inches high; the ſtalk is firm, round, ribbed, erect, and hollow; the leaves are divided, like the others, into a multitude of fine ſlender parts, but conſiderably ſmaller, and from this circumſtance it derived the Engliſh name of *fennel flower*. Theſe leaves ſtand irregularly on the ſtalks, and are of a paliſh green; the flowers ſtand at the extremities of the branches, and are of ſingular elegance. They are generally blue, but ſometimes white; of moderate ſize, and the green leaves incloſing the flowers give them a peculiarly pleaſing appearance.

It has been aſſerted, that the juice of the plant, freſh gathered, is ſerviceable in the head-ache; and being ſnuffed up the noſe, occaſions ſneezing; taken inwardly, it works by urine, and is eſteemed a remedy for the jaundice.

Hogs Fennel.

THIS plant has ſeveral other Engliſh names, ſuch as *brimſtone-wort*, *hareſtrong*, and *ſow fennel*; it has divided leaves, and cluſters of yellow flowers, and bears ſome diſtant reſemblance to fennel. It grows about two feet high; the ſtalk is round, channelled, hollow, erect, and branched; the diviſions of the leaves are much broader than thoſe of fennel, and they are generally threefold; the flowers are ſmall and yellow, but unite to form large cluſters, and the ſeed is oblong and flattiſh; at the top of the root, a tuft of hairy matter may be always diſcovered; this is made up of the fibres of decayed leaves, and has a ſingular appearance. The root is large, long, and of a brown colour, and this part is uſed medicinally; it is directed to be boiled in water, and the decoction drank night and morning, and is recommended to diſſolve tough phlegm, and to relieve the aſthma: it operates by urine, promotes the female diſcharges, and removes obſtructions.

Fœnugreek.

THIS plant is of the trefoil kind, but ſomewhat ſingular in it's manner of growth; it is ſometimes cultivated in the fields for the ſeed, which is ſaid to be emollient. It grows a foot and a half high; the ſtalks are round, ribbed, and branched; the leaves are ſhort and broad, and ſtand three upon every ſtalk, as in the common trefoils, and are notched about the edges; the flowers are white and ſmall, and reſemble a pea-bloſſom; the pods are flat, and contain a quantity of yellow ſeeds, of an irregular figure and offenſive ſmell.

It is recommended to ſoften, digeſt, ripen, and diſperſe tumours, and to relieve pains; and is uſed in emollient clyſters, and to expel wind, either bruiſed or in a mucilage, in which ſtate it is alſo ſaid to relieve inflamed or blood-ſhot eyes.

Male Fern.

THIS is a common dry weed, which grows at the roots of trees, and in dry ditches. It has no flower ſtalk, but ſeveral leaves ſpringing together from the root; and each of theſe is in itſelf a diſtinct plant. It grows two feet high, and ſometimes a foot in breadth; the ſtalk is naked in the lower ſix or eight inches, and from thence is ſet on each ſide with a row of ribs or ſmaller ſtalks, each one of which carries a double row of leſſer leaves, with an odd one at the end, the whole together making up one great leaf, as in many other plants of this tribe.

The ſeeds grow on the backs of theſe ſmaller leaves in round cluſters, appearing brown and duſty; the root is long and thick, and the whole plant emits a diſagreeable ſmell. The root has been recommended for curing the rickets in children, and in powder to deſtroy worms, and dry up and heal old ulcers; externally applied, the root is ſaid to cure burns.

Female Fern.

THIS weed grows much higher, and ſpreads more than the laſt mentioned, and is common on heaths throughout England. It reaches to four or even five feet in height; the ſtalks are round, ſmooth, and green; the leaves are ſet on each ſide, and are divided into fine parts; and, upon the whole are ſo much like the male fern, that except for the diſtance of the ribs it might be conſidered as one leaf.

The diviſions or ſmaller leaves which go to make up the large one, are oblong, ſtrong, hard, and of a dark colour; and they are ſo ſpread, that the whole plant is frequently three feet wide. The ſeeds ſtand on the edges of the ſmall leaves, in little cluſters, of a duſky appearance, but they are not ſo common on this as on the male fern; for the propagation of this plant is ſo effectually provided for by the roots, that the ſeeds are in a great meaſure uſeleſs: and it may always be obſerved, that where the roots of plants ſpread much, the ſeeds are ſparingly produced, and the contrary; Nature having directed the means by which a proportion of every ſpecies is to be kept up, and to reſtrain ſuch an exceſſive increaſe as might over-run the earth.

The roots of this plant, freſh gathered, and made into a decoction, are ſaid to be the moſt effectual deſtroyers of that long and flat worm in the bowels, which is called the tape-worm, that has ever yet been diſcovered.

Flowering Fern.

THE principal difference between this and the other fern, is in the manner of it's flowering; and even this, when particularly examined, does not ſeem to be very material. It grows three feet or more high, and the leaves are very regularly and beautifully conſtructed; they are compoſed in the manner of the other ferns, each of ſeveral ſmall ones, but theſe are longer and larger than in any of the other kinds, nor are they at all indented on the edges; they are at firſt of a bluiſh green colour, and afterwards turn yellowiſh; many leaves ariſe from the ſame root, but thoſe only bear ſeeds, which riſe about the middle; the ſeeds ſtand only on the upper part, and cover the whole, or nearly the whole ſurface of the leaf, and the little wings turn inwards, and ſhew their backs rounded up; theſe are brown, from being covered with the ſeeds, which are of that colour; and they have ſo different an appearance from all the reſt of the plant, that they are uſually called flowers, though they have no more claim to that diſtinction than the ſeeds of the other ſort. The root is long and very fibrous; the plant grows wild in boggy places, in ſome particular parts of England, but is not very common.

A decoction of the freſh roots is ſaid to be a good diuretic, and to remove obſtructions of the liver and ſpleen; it is not much uſed, but it has been known to cure a jaundice, taken in the early ſtage of the diſorder.

Feverfew.

FEVERFEW is a common wild plant, which has divided leaves, and bears a multitude of ſmall flowers like field daiſies. It grows about farm yards, and other uncultivated places; the ſtalk is round, hollow, ſtraight, ribbed and branched, and riſes two feet high. The leaves are large, but divided into many ſmall ones, and thoſe are round and indented; they are of a yellowiſh green colour, and have a particular but rather agreeable ſmell: the flowers ſtand ſcattering about the tops of the ſtalks, and are ſmall, white round the edges, and yellowiſh in the middle. The root is white, fibrous, and inconſiderable.

The leaves, flowers, and ſtalks, may be uſed; they are beſt freſh, but preſerve ſome virtue dried. This herb may be given in tea, and is excellent in hyſteric complaints; it alſo deſtroys worms: the juice of the green plant being expreſſed and given in white wine, promotes female diſcharges, and relieves other diſorders of that ſex; it is uſeful in a decoction for colds, coughs, and ſtraitneſs of the breaſt. It's name beſpeaks the virtues formerly attributed to it. The country people make a poſſet with it, which they eſteem a ſpecific againſt colds and feveriſh ſymptoms.

The Fig-Tree.

THIS fruit-tree, though a native of warmer climates, is ſufficiently known in our gardens. The trunk is thick and irregular, and the branches, which are numerous, grow equally without any ſort of order; the leaves are large, of a very fine appearance, of a dark green colour, divided deeply at the edges, and full of a milky juice; the fruit appears firſt, and contains the flowers, which expand and form what is called the eye. The *fig-tree* produces fruit twice in the year; the firſt crop in ſpring, the ſecond appears towards September, but theſe ſeldom arrive at maturity in this country. In Spain, Italy, and ſome parts of France, they are dried, and are thoſe figs which are ſold in the ſhops here, but they grow larger and ripen better in thoſe climates than in ours.

Our own figs are wholeſome fruit, and thoſe which are imported are applied outwardly to ſwellings with ſucceſs, ſoftening, promoting ſuppuration, and procuring eaſe during the formation of matter; they are alſo ſerviceable in coughs, aſthmas, and diſorders of the lungs. The milk of the green leaves was formerly preſcribed as a ſalutary dreſſing for bites inflicted by mad animals or venomous reptiles.

Fig Wort.

THIS is a wild plant growing commonly in woods and damp ditches. It is tall, of regular growth, and bears ſmall flowers of a deep purple colour. It reaches to the length of four feet. But there is alſo another kind of it which is found in wet places, and this is more properly called *water betony*, and may be diſtinguiſhed by the round indenting of the leaves, and by growing in or cloſe by water, from the right *fig wort*, which only loves ſhade and dampneſs, but not abſolute wet. The ſtalk is ſquare, ſtraight, hollow, and very ſtrong: the leaves ſtand two at each joint, oppoſite each other; they are large, broad at the baſes, but narrower at the points, and ſharply indented; they ſtand on long footſtalks, and are ſhaped like the nettle leaf, but are perfectly ſmooth, and of a ſhining colour, which is as often brown as green, as is alſo the whole plant. The flowers are of very inconſiderable ſize, and gaping; they are of a very dark purple colour, almoſt black. The root is long, white, and full of little knobs; it ſpreads exceedingly under the ſurface of the earth.

The juice of the freſh-gathered root is ſaid to be an excellent ſweetener of the blood, taken in ſmall doſes and for a long time together, cleanſing the ſkin from boils, ſcurf, ſcabs, and eruptions. The freſh roots, bruiſed and applied externally, are alſo reputed to be uſeful in diſpelling ſcrophulous tumours, and abating the pain, ſwelling, and inflammation, occaſioned by the piles.

The Fir-Tree.

THIS tree grows wild in Germany and many other parts of Europe, but in Great Britain it is only found in gardens and plantations. No kind of fir is a native of this country; that which is called the *Scotch Fir*, being properly a *pine*, and not a *fir*.

Fir-trees grow to a conſiderable height, with great regularity; the trunk is covered with a rough bark, cracked on the ſurface, and emitting a reſinous ſmell; the leaves are numerous, and ſtand in very elegant order on the branches. They are placed in two rows, one oppoſite to the other; and are of an oblong ſhape, but ſomewhat broad and flat. They are of a pale green colour, and of a white caſt beneath. From this appearance, the tree is called the ſilver fir, and from the diſpoſition of the leaves, which reſemble in manner of growth the yew-tree, it ſometimes takes the name of *yew-tree fir*. The cones ſtand upright; and, in this kind, are large, long, and brown.

The tops of this fir, are recommended as great ſweeteners of the blood, operating powerfully by urine. They may be mixed with other ingredients in diet-drinks, or brewed in the beer which is commonly drank at meals.

The Red Fir-Tree, or Pitch-Tree.

THIS tree arrives at the ſame ſize, but is not ſo regular in it's growth, nor are it's leaves diſpoſed in the ſame way as the other. The trunk is thick, the bark reddiſh, and the wood rather more ſoft than that of other trees of the ſame ſpecies. The branches are numerous, and ſtand irregularly. The leaves are of an oblong ſhape, narrow, and ſharp-pointed, but they do not grow in two even rows, as in the tree laſt deſcribed; thoſe of the red fir ſtand irregularly on the twigs. The cones are long, but ſlender, and hang downwards. The whole tree emits a ſtrong reſinous ſmell.

The tops of this boiled in water, or made into diet-drinks, are recommended in the ſame caſes as the common fir-tree; but as they make a much more nauſeous liquor, and do not appear to poſſeſs virtues at all ſuperior to the other, this will be ſeldom uſed where the other can be procured.

From the fir-tree, pitch, tar, as alſo the Straſburgh and ſome other of the turpentines, are obtained; the other kinds being furniſhed by the larch and turpentine trees, as will be obſerved hereafter. To procure the tar and pitch, the wood is piled in heaps, and lighted at the top, and the tar oozes out at the lower parts; and this being boiled, becomes hard, and is the ſubſtance which is called pitch.

All the turpentines are in a greater or leſſer degree balſamic, and operate to promote urine, but of theſe we ſhall treat more at large, under the other trees which produce it. Tar-water was a celebrated and faſhionable remedy for ſome years, and in many caſes was unqueſtionably ſerviceable; but, like other popular medicines, it was too generally applied, and failing of ſucceſs in ſome diſorders, it fell into diſrepute, and has been very little uſed for ſome time paſt.

Sweet Flag.

THIS common wild plant grows among the flags and ruſhes, by our ditch ſides, and is ſeldom diſtinguiſhed from the other ſorts. It riſes to the height of three feet, but conſiſts only of leaves without any ſtalk; theſe are long, narrow, and of a paliſh green colour; among the leaves, there are generally three or four reſembling the reſt in all other reſpects, but that theſe bear a cluſter of flowers, which burſt out at one ſide, within five or ſix inches of the top; this cluſter is long, thick, and browniſh, and differing only from the catkin of a filbert-tree in ſize, this being much the larger; the root is long, flat, and creeping, and is of a ſtrong and rather diſagreeable ſmell when it is freſh, but being dried, it becomes very fragrant and aromatic. That which grows in England is of ſome value, becauſe we can have it freſh; but the dried root, which is imported from warmer countries, is more fragrant.

The juice of the freſh root, is recommended ed to promote the female periodical diſcharges, working by urine moderately, and not being offenſive to the ſtomach. The dried root is cordial and perſpirative, warms the ſtomach, and is ſaid to be uſeful in removing the effects of indigeſtions, and feveriſh diſorders.

Common Acorus, or Yellow Flag.

THIS flag grows by the ſide of every river and ditch, and is diſtinguiſhed by long leaves of a bluiſh green colour, and large yellow flowers, reſembling in ſhape thoſe of the iris or flower de luce. The yellow flag ſometimes grows three or four feet high: the ſtalk is a little flatted, though rather inclined to roundneſs, of a pale green, very ſtraight, firm, and not branched. Two or three ſhoots only riſe from the boſom of the leaves, which are from one foot to two in length, narrow, flat, and ſharp at the edges; at the ſummits of the ſtalks, ſtand the flowers, which are large and beautiful. Theſe are followed by numerous ſeeds, which are contained in large veſſels of a triangular form. The root is creeping, and is the only part uſed medicinally; this has been confounded with the root of the ſweet flag, but is called by way of diſtinction, *falſe* or *baſtard flag*, and is not at all like the others in ſhape, colour, or qualities. The root of this plant is of a reddiſh brown, without ſmell, and of a very harſh taſte It is reputed to be highly aſtringent, and is directed to be taken up in ſpring and dried, and afterwards given in powder, to reſtrain fluxes and overflowings of the periodical diſcharges.

Flax.

THIS plant is equally beautiful and uſeful, and is cultivated as well for the ſeeds, as the ſtalks. It grows three feet high; the ſtalk is round and ſlender, but firm and erect; the leaves are ſmall, of an oblong form, and narrow, and ſtand irregularly on it, but are extremely numerous. Towards the top, the ſtalk divides into ſeveral ſhort branches; ſometimes three, or four, and ſometimes more; and theſe bear the flowers, which are large, and of an elegant blue colour. Each of them is ſucceeded by a round ſeed-veſſel, containing a number of ſeeds.

This is the ſeed which is called linſeed, and which is applied to many medicinal uſes. A tea made of it, is ſerviceable in coughs, and all complaints of the breaſt and lungs; bruiſed, or reduced to flour, it makes excellent cataplaſms and poultices for ſwellings, and to aſſiſt ſuppuration. The oil which is drawn from it, is given ſucceſsfully in pleuriſies, and peripneumonies, and is alſo recommended as an admirable medicine in the gravel and ſtone.

Purging Flax.

THIS little herb grows abundantly in hilly paſtures, and in parks, warrens, and other undiſturbed grounds, in different parts of England. It does not exceed eight inches in height; the ſtalk is round and ſtrong, and divides at the top into many ſmall branches. The leaves are ſmall, oblong, wide, and obtuſe at the points, and ſtand two at each joint. The flowers are of inconſiderable ſize, and white; the whole plant has much the appearance of the ſpecies of chickweed, but is diſtinguiſhed by the ſeed veſſel, and ſeed, to be altogether of the flax kind. The root is ſmall and fibrous.

The leaves and ſtalks of this boiled in ale, make a ſtrong but not unſafe purge; the country people conceive, that it relieves rheumatic pains, and many other obſtinate diſorders. It has alſo the reputation of being a remedy for dropſies; and may probably be found uſeful in all caſes where a ſtrong and ſmart purge is required.

Fleabane.

THIS plant is commonly found about damp places, it grows to the height of two feet; the ſtalk is round and ſtraight, very ſubſtantial and ſtrong, and frequently of a reddiſh colour. The leaves are very numerous, ſtanding irregularly; they are not much more than an inch long, of moderate breadth, rough on the ſurface, and of a whitiſh green colour. The flowers, which blow in autumn, ſtand at the tops of the branches; they are larger than a ſhilling, yellow, and compoſed of many narrow leaves. The whole plant ſmells rather offenſively.

There is alſo another kind of *fleabane*, which is ſmaller, and has globous flowers; and it has been frequently diſputed, whether this, or that we have deſcribed, poſſeſſes the greater virtues, but the latter is generally allowed to be ſuperior. The juice of this plant, is ſaid to cure the itch, applied externally; and the whole herb has the reputation of deſtroying or driving away fleas, from which quality it has received the name it bears.

Fleawort.

THIS herb is a native of France, and though of no great beauty, is kept in gardens in England. It is about a foot high; the ſtalks are feeble, greeniſh, and ſomewhat hairy. The leaves ſtand two, or ſometimes more, at every joint; they are long, very narrow, and a little hairy, as well as the ſtalks: from the boſoms of theſe leaves, riſe long naked ſtalks, on which ſtand ſpikes of ſmall flowers, ſomewhat reſembling the ſpikes of plantain, only that theſe are ſhorter. Each flower is ſucceeded by two ſeeds, which are ſmooth, blackiſh, and of the ſhape of fleas; from which circumſtance it takes the name. Each head bears many flowers. A mucilage made of the ſeed is ſaid to cool the throat in fevers.

Flix Weed.

THIS plant grows wild about waſte places and farm yards, and is made more conſpicuous by it's leaves than by it's flower. It riſes to the height of two feet, and the ſtalk is round, ſtraight, very ſubſtantial and ſtrong, and not much branched; the leaves are of moderate ſize, and very elegantly divided into numerous ſmall parts, each of which is long and narrow; theſe leaves ſtand irregularly on the ſtalks. The flowers are very ſmall, and of a yellow colour, and grow in a kind of ſpikes at the tops of the ſtalks; they are ſucceeded by ſhort ſeed pods. The ſtems and leaves are of a dark green colour.

The ſeeds are uſed in medicine, and are directed to be gathered juſt as they are ripe, and boiled whole. The decoction is ſaid to cure the bloody flux, and to be excellent againſt the overflowings of the monthly diſcharges.

Flower Gentle.

WE do not know that this plant is found in a wild ſtate in Great Britain, but there are many kinds of it in our gardens; that uſed in medicine is the largeſt ſort, with a drooping purple ſpike. It grows three or four feet high. The ſtalk is ſtrong, round, and channelled; ſometimes green, but oftener red. The leaves are oblong, broad, not indented at the edges, but pointed at the extremities: they are very large; and, as well as the ſtalks, are often tinged with red. The flowers are of a purple colour, growing in long and beautiful ſpikes dropping downwards.

Theſe flowers are medicinally uſed: they are directed to be gathered before they are full blown, and dried; and are given in powder, as an aſtringent, to reſtrain violent purgings and overflowings of the periodical diſcharges; a decoction may be made of the flowers, which will anſwer nearly the ſame purpoſes.

Flower de Luce.

THIS is alſo a common flower in gardens. The plant grows near a yard high; the leaves being about a foot and a half long, narrow, flat, and in all reſpects reſembling the leaves of the common yellow flag, like which they are alſo of a bluiſh green. The ſtalks are round, or a little flat, thick, ſtrong, ſtraight, and of a more perfect green than the leaves; the flowers are large, and of a violet blue; the root ſpreads near the ſurface, and is large, of a browniſh colour, and jointed or divided by rings.

If the juice of the freſh roots of this plant is mixed with white wine, it makes a ſtrong purge, and ſometimes alſo acts as an emetic, but this effect does not render it injurious. It is preſcribed as a cure for dropſies; and ſome phyſicians, both ancient and modern, are of opinion that it is extremely ſerviceable in that diſeaſe.

Florentine Flower de Luce.

THIS is likewiſe a garden plant, but is not found there ſo frequently as the former, from which it ſcarce differs in any other reſpect than that the flowers of this are white; the root ſpreads in the ſame manner, and the leaves are of the flag kind; the ſtalks are nearly of the ſame height, and the flowers as large as thoſe of the blue kind; and both are perfectly of the ſame form.

But the root of this kind is fragrant when dried, and is kept in the ſhops as a remedy for diſorders of the lungs, coughs, hoarſeneſſes, and all the diſagreeable ſymptoms attending colds; it alſo promotes the periodical diſcharges.

Fluelline.

THIS plant is common in corn fields, and bears a beautiful though rather ſmall flower; the ſtalks are ſeldom more than five or ſix inches long, ſo feeble that they trail upon the ground, and ſomewhat hairy; the leaves are alſo hairy, ſmall, round, and not placed in any regular form. The flowers are variegated with bright and beautiful purple and yellow; they have heels behind, and ſtand upon little hairy foot-ſtalks, which riſe from the bottoms of the leaves.

Another kind bears leaves which have two ears at their baſe, but is in all other reſpects the ſame, and poſſeſſes the like virtues as that firſt deſcribed; the juice of either, expreſſed and given in water, or a tea or decoction made of the leaves and ſtalks, is ſaid to be cooling and aſtringent, and on theſe accounts is given in fluxes, and overflowings of the female evacuations.

Fools Stones.

THIS plant appears in great beauty in our meadows and paſtures in the month of June. It does not grow above ten inches high; the leaves are about ſix inches in length, and three quarters of an inch in width, of a very dark green, with large and irregular ſpots of black in different parts; the ſtalk is round, ſtout, erect, and fleſhy, and is ſeldom cloathed with more than two or three ſmaller leaves of the ſame figure as thoſe from the root; at the top are the flowers, in ſpikes of an inch or an inch and a half long; they are not of any conſiderable ſize, and differ in ſhape from the generality of flowers; they are of a deep and ſhining purple colour, though they are ſometimes white. The whole plant is full of juice; the root conſiſts of two round bulbs or lumps, which are white and full of a ſlimy juice.

The root only is uſed in medicine. It is conceived to be a ſtrengthener, taken internally, but this opinion does not appear to be well ſupported. Applied externally, in poultices and cataplaſms, it is excellent to reduce hard ſwellings; there are a great many other kinds of this plant in the meadows of England, but this only is uſed; the root which is ſold in the ſhops by the name of ſalep, is brought from Turky, and is the root of a plant of the ſame kind. This has been found by experience to be ſtrengthening and reſtorative, and ſerviceable in conſumptive caſes, and for decayed or broken conſtitutions.

Fox Glove.

THIS wild plant of great beauty, grows alſo in paſtures, and about wood ſides, in many parts of England. It riſes to the height of three feet. The leaves are long and broad, rough on the ſurface, pointed at the ends, and finely indented round the edges. The ſtalks are round, ſtrong, firm, and erect; and of a whitiſh colour. The flowers droop from the ſtalk in a kind of ſpike; and are hollow, red, and large, but ſomewhat ſpotted with white, and reſemble in ſhape the extremity of the finger of a glove.

Some ſtrong and hardy country people venture on a decoction of the leaves, in water or ale, for the rheumatiſm, and other ſtubborn complaints of the like kind; but it works ſo ſtrongly upwards and downwards, and if taken in too large quantities occaſions ſuch violent ſymptoms, that it ſhould be uſed with extreme caution; yet, under proper regulation, it is ſaid to cure, alſo, quartan agues, and even the falling-ſickneſs. An ointment is made of the flowers of *fox glove*, in May butter, which was formerly a famous application to ſores and ulcers of the ſcrophulous kind.

French Mercury.

THIS plant ſometimes, but not very frequently is found wild in England. It is remarkable for little, beſides it's bearing male flowers on ſome of the plants, and female flowers on others, in the ſame manner as ſpinage, hemp, and ſome others, as will be more fully explained hereafter. *French Mercury* grows ten inches high; the ſtalks are angular, green, thick, but not ſtrong, nor are they perfectly upright; the leaves are of an oblong form, broad in the middle, ſharp at the point, finely indented at the edges, and of a dark green colour. The female plants produce only two ſeeds, which grow together at the top of a ſmall ſpike. The male plants have only a ſpike of duſty flowers, which are neither followed by ſeeds or fruit. But the female plant is commonly miſtaken for the male, and the contrary.

A decoction of the leaves and ſtems of the plant, freſh gathered, purges gently, but works principally by urine; it is ſaid to be cooling, and ſerviceable to perſons of hot or over-full conſtitutions. The dried herb made into a decoction, is ſometimes uſed in emollient clyſters.

Frog Bit.

THIS plant has been by many writers conſidered as a kind of water-lily; becauſe it hath round leaves, and floats upon the water, but it is of totally a diſtinct ſpecies: and duck weed might with equal propriety be called a water-lily, becauſe that alſo has round leaves, and floats upon the water.

The leaves of *frog bit*, are of a round figure, and a duſky deep green colour: they expand to the breadth of a crown-piece, and riſe many together in a tuft, from the ſame part of the ſtalk. This ſtalk extends itſelf juſt beneath the ſurface of the water, and from it deſcend roots, which do not reach the bottom, but are ſuſpended in the water, in the ſame manner as the fibres of duck weed. The flowers ſtand ſingly upon ſlender foot ſtalks; and are white, and composed each of three leaves, which produce a ſingular appearance.

The freſh leaves are uſed as poultices or cataplaſms to ſwellings or inflammations, and are ſaid to be very cooling.

Fumitory.

THIS plant grows wild, and is commonly found in the corn-fields. It is about ten inches high. The ſtalk is round, channelled, of a paliſh green, moderately thick, but not very ſtrong or perfectly upright. The leaves are large, of a faint green colour, with a bluiſh caſt: they are divided into a vaſt number of ſmall parts, which are blunt, and round at the ends. The flowers, which appear in the month of June, are ſmall and purple: they have a heel behind, and ſtand together in numbers in a kind of ſpike. The whole plant has but little taſte.

The juice expreſſed from the leaves and ſtalks of this plant, is ſaid to be an excellent remedy for the ſcurvy; to remove obſtructions of the internal parts; and to cure the jaundice, dropſy, and other diſeaſes which are occaſioned by obſtructions. The juice or decoction of the leaves and ſtalks of this plant, is alſo recommended in hectic fevers, pleuriſies, and peripneumonies; and it has the reputation of clearing the ſkin from eruptions, and in a gargle, of drying up and cleanſing ulcers in the mouth.

The Furze Buſh.

THIS wild buſh, which grows on every heath and mountain in Great-Britain, and is in ſome parts of the kingdom called *gorze*, is too common to need much deſcription. The ſtem is large, tough, and of a whitiſh colour, overſpread with fragments of an irregular appearance. The branches are very numerous, and ſpread in ſuch a way, that when the plant is not cut or cramped in room, it forms a kind of globular or ſemi-globular tuft upon the ground. But there is another ſort which grows in cloſe brakes, and riſes to a very conſiderable height; differing only from this in that particular, and in having one large ſtem divided into branches at ſome diſtance from the root. The thorns are very numerous, and very ſharply pointed, ſtanding as it were one upon another. The leaves are ſmall and narrow, of a pale green colour; and they fall off ſo quickly, that it is without any for a conſiderable part of the year. The flowers are extremely beautiful, and of a bright yellow colour; it produces a great quantity of ſeeds, which are contained in pods. The root ſpreads amazingly; and when the ſhrub has once thoroughly fixed itſelf in any place, it is not eaſily extirpated; the ſmalleſt piece of it left in the ground, will produce a new plant.

Both the root and ſeeds are uſed medicinally, but neither of them are in much reputation. The ſeeds dried and powdered are reputed to be aſtringent, and may be uſed to anſwer that intention among other things of the like quality. The bark of the root freſh taken up, and given in infuſion, is ſaid to work by urine, and to be a remedy for the gravel; but there does not ſeem to be any good proof that it is very efficacious: it loſes it's virtue when it is dried.

Garlic.

THIS plant is kept in our gardens for the double purpoſes of medicine and the kitchen. It grows two feet or two feet and a half high. It has broad and long leaves, of a full green colour. The ſtalk is round, ſmooth, ſtrong, erect, and of a pale blue or whitiſh colour. The flowers are alſo white and ſmall, taken diſtinctly; but they grow together, and form a large tuft at the ſummit of the ſtalk. The root is white, or ſometimes reddiſh on the external coat; it is compoſed of a number of bulbs, or (as they are more commonly called) cloves, joined together, and covered with one common ſkin: the root is fibrous at the bottom. The whole plant has an exceeding ſtrong ſmell, and a very pungent and acrid taſte.

The root, boiled in water, and the decoction reduced into the form of a ſyrup with honey, is recommended as an excellent remedy in aſthmas, hoarſeneſs, coughs, and in all the uſual effects of colds, as well as in difficulties of breathing. It is alſo an exceeding good diuretic.

Gentian.

THIS plant is a native of Germany, but is commonly kept in our gardens. It grows to the height of two feet and a half. Thoſe leaves which riſe from the root, are of an oblong ſhape, broad, of a green colour inclining to yellow, and pointed at the ends. The ſtalk is thick, ſtrong, erect, and of a browniſh yellow colour: two leaves ſtand at every joint, which reſemble the others, but are ſmaller; and as the ſtems riſe, a number of flowers ſpring alſo from every joint; theſe are ſmall, of a yellow colour, having each a large lump in the middle, which is the foundation of the ſeed-veſſel, and has a great quantity of yellow threads about it. The root is large, long, and divided into many parts. It is brown on the outſide, and yellowiſh within, and very bitter to the taſte.

The root is uſed in medicine; and is kept dry in the druggiſts ſhops, and conſtantly uſed in every modern preſcription, as a ſtomachic bitter. The common bitter tinctures and infuſions, are only compoſed of *gentian root* and the peel of Seville oranges. Beſides ſtrengthening the ſtomach, and creating an appetite, gentian root is ſaid to remove obſtructions, and to be uſeful in moſt chronic diſorders; the powder of gentian is a remedy for agues, in common with other bitters.

Germander.

THIS plant is alſo naturally of foreign growth, but is kept in our gardens. It ſometimes grows a foot or more in height, but ſeldom ſtands perfectly upright. The ſtalks are green, ſquare, and ſomewhat hairy. The leaves, which ſtand two at each joint, are oblong, very deeply indented at the edges, of a ſolid or fleſhy ſubſtance, ſmooth and green on the upper ſurface, but hairy beneath. The flowers, which appear in July, are ſmall and of a purple colour, reſembling thoſe of the little dead nettle: they ſtand in cluſters round the higher joints of the ſtalks.

Germander has been celebrated for many virtues. In particular, it is ſaid to be excellent againſt the gout and rheumatiſm; however that be, it promotes urine and perſpiration, is ſerviceable in the removal of all obſtructions of the internals, in ſuppreſſions of the female diſcharges, and in fevers, ſcurvy, jaundice, and dropſy; it is alſo ſaid to be an antidote againſt poiſons. The expreſſed juice of the leaves and ſtalks ſeems to be the beſt form in which it can be given, though it is more commonly adminiſtered in decoction or infuſion.

Water Germander.

THIS plant grows wild in ſome parts of England, and is alſo frequently kept in gardens for it's medicinal virtues. The ſtalks are ſquare, of a duſky green, hairy, and ſo feeble that they ſeldom riſe much from the ground; they are eight or ten inches long. The leaves are broad, but ſhort; and indented about the edges, but not ſharply or deeply, as thoſe of the germander laſt deſcribed: they are ſoft and woolly to the appearance and touch, and of a dull deep green colour. The flowers, which are extremely ſmall, are red, and ſtand in little bunches at the upper joints of the ſtalks. The whole plant emits a ſtrong and unpleaſant ſmell.

The roots, ſtem, and leaves of this plant, may be uſed freſh or dried; it has been celebrated greatly as a perſpirative, and for it's virtues againſt peſtilential fevers, and all kinds of contagious diſeaſes; a decoction of it was formerly uſed as an antidote to poiſon, and for bites and ſtings of mad or noxious animals or reptiles, and was alſo ſaid to relieve violent pains in the ſide or ſtomach; it is a principal ingredient in the compoſition of the well-known medicine which is called in the ſhops *diaſcordium.*

Gladwin.

THIS is a wild plant of the iris kind, leſs remarkable for beauty than for it's virtues. The root creeps near the ſurface of the ground, like that of the common flower de luce. The leaves grow to a foot in length, narrow, pointed at the extremities, and of a high and ſomewhat unpleaſant ſmell. The ſtalks are round, ſtrong, erect, and of a bluiſh green colour. The flowers reſemble thoſe of the common flower de luce already deſcribed, only that they are ſmaller, and of a more dull colour. There is a little daſh of purple in the upper part of the flower, and ſome veins and ſtreaks of the ſame tinge in the lower part of it; the reſt is of a dull dead hue, ſomewhat between grey and brown, and the flowers are of a faint and bad ſmell.

The juice of the root is preſcribed to promote urine, and the female diſcharges. The dried root, powdered or in an infuſion, is ſaid to produce good effects in all hyſteric and hypochondriac diſorders, faintings, fixed pains in the breaſt, and ſhortneſs of breath; taken inwardly, and externally applied, it has proved, as it is ſaid, an excellent remedy for ſcrophulous ſwellings; and it is reputed to be gently aſtringent after it has mildly operated by ſtool.

Goats Beard.

THIS plant is of the natural growth of the meadows of England, where it is diſtinguiſhed by it's narrow leaves, of a lively green colour, and the long leaves of the cup which holds the yellow flowers. It reaches a foot and a half in height; the leaves, as before mentioned, are very narrow, broadeſt at the baſe, and ſmaller all the way to the point. The ſtalk is round, large, ſtrong, very erect, and towards the top divides into two, three, or more branches. The flowers riſe from the extremities of the ſtalks; they are of a pale beautiful yellow colour, of conſiderable ſize, and are ſurrounded by the cup, which is compoſed of long and narrow green leaves, which, during that part of the day in which the ſun is high, are cloſed over it, ſo that it appears to be only in bud. The ſeeds are winged with a fine white down, reſembling that of dandelion, and like that alſo they ſtand when ripe upon the tops of the branches, in a round head. The root is long, ſlender, and white; and, as well as the whole plant, full of a milky juice, which being expoſed for ſome time to the air, changes to a yellow hue, and becomes as thick as cream.

The root, which is the medicinal part, is ſo pleaſant to the taſte, that it may be eaten at table as well as carrots or other roots, and it is ſuperior to them all in good qualities. It has the reputation of being an admirable reſtorative, and peculiarly ſerviceable to perſons who have laboured under any long illneſs; for this purpoſe, it ſhould be taken as food, which may be prepared by boiling it firſt in water, then cutting it to pieces, and boiling it again in milk, which may be rendered palatable in the uſual way; and thus it is ſaid to become, a moſt nouriſhing and excellent medicine. The diſtilled water from theſe roots has been alſo recommended for internal impoſthumes, pleuriſy, ſpaſms, and fixed pains in the ſide, diſorders of the breaſt, and internal parts; and for the ſtone and gravel.

Goats Rue.

THIS tall plant, is a native of Italy, but grows in the gardens of Great Britain; it riſes to the height of three feet. The ſtalks are round, channelled, hollow, rather weak, and of a paliſh green colour; they are very much branched, but not altogether upright. The leaves are long, and of proportionable breadth; and each of them is compoſed of ſeveral pairs of leſſer leaves, with an odd one at the end: theſe ſmaller leaves are of an oblong ſhape, narrow, of a green colour inclining to yellow, thin, and even at the edges. The flowers are but ſmall, and of a pale blue colour; numbers ſtand upon the ſame foot-ſtalk, in a drooping poſition.

The ſtalks, leaves, and roots of this plant, are medicinal. It is directed to be gathered juſt as it comes to flower, and being dried, and given in infuſion, is ſaid to promote gentle perſpiration, and to be ſerviceable in fevers. Many other virtues are aſcribed to this plant; thoſe we have mentioned ſeem to be well atteſted.

Golden Rod.

THIS plant is commonly found wild upon heaths, in different parts of England. It grows two feet high, the ſtalk is ſtrong, upright, round, and ſomewhat hairy. The leaves are long, broad in the middle, but narrower at the baſes and extremities; they are indented at the edges, rough and hairy on the ſurface, and of a full green colour. The flowers, which are produced in autumn, are ſmall, of a fine yellow colour, and growing many together in thick and ſhort ſpikes, they make a beautiful appearance. The root, which is long, is covered with a brown bark, and as well as the ſtem, leaves, and flowers, is of a harſh taſte.

The root is directed to be taken up in the ſpring; and, being dried, and powdered, is ſaid to be an excellent medicine, to reſtrain violent purgings, and for overflowings of the monthly diſcharges, bloody ſtools, or any other internal hæmorrhage. The whole plant has been long celebrated, as a vulnerary or wound herb; and has been given in decoctions, both in caſes of inward injuries, and in obſtructions in any of the inteſtinal parts.

Gold of Pleaſure.

THIS elegant plant is common in many parts of England, and may be diſtinguiſhed by an unuſual quantity of ſeed-veſſels. It riſes to the height of two feet. The ſtalk is round, large, ſtrong, erect, and towards the top divides into a number of branches, all ſtanding upright. The leaves, which are not very numerous, are placed irregularly; they are long, not exceedingly broad, and of a light green colour: they are indented at the edges, and ſurround the lower part of the ſtalk. The flowers are ſmall, and white. The ſeed veſſels are round and ſhort, and in ſuch numbers as to form a kind of ſpikes, from near the bottom to the tops of the branches, on which a few flowers ſtill remain in bloom, after they are withered from the ſtems.

An infuſion of the freſh tops of the plant, before it has ſeeded, ſweetened with honey, is recommended as an excellent remedy for ſore throats, and ulcers in the mouth. A conſiderable quantity of oil may be expreſſed from the ſeeds, which is pleaſant and well taſted; but we do not know that it has ever been applied to any medicinal uſes, though it may probably poſſeſs ſome very valuable qualities.

Gooſeberry.

THE ſhrub which bears this fruit, is too well known to require a very particular deſcription. It ſeldom exceeds four or five feet in height, except it is trained againſt a wall, in which caſe it riſes much higher: the woody parts are covered with a brown rough bark, but the young ſhoots are of a lively green; the leaves are of a full green colour, and beautiful form, being deeply and regularly indented, ſo as to make three, five, or ſeven diviſions. The flowers are of a whitiſh green, and theſe are ſucceeded by green, red, or amber-coloured berries. The whole ſtem and branches are armed with ſtrong and ſharp thorns.

The green berries boiled in water, are ſaid to be cooling in fevers, to create an appetite, and to check purgings and hæmorrages; but they muſt be uſed for theſe purpoſes with caution: the ripe fruit is recommended as more wholeſome than moſt others which are produced in our gardens.

The Gourd.

THIS is a plant of the melon or cucumber kind, but much larger, which is cultivated in gardens. The ſtalks run to the length of ten or twelve feet, and are large, angular, and hairy, but ſo weak that they are unable to ſupport themſelves upright, and either trail upon the ground, or climb upon other plants or trees. The leaves, which are of a very large ſize, both in length and breadth, are indented deeply: they are rough, and of a blackiſh green. The flowers are large, bell-ſhaped, white, and covered with a kind of down, though not ſo univerſally on the outer, as on the inner ſurface.

The fruit grows large, is covered with a hard firm ſhell, which contains within a fleſhy and juicy ſubſtance. The ſeeds, which are flat, oblong, and hard, grow in the manner of thoſe of melons, and are the only part uſed medicinally: they are cooling and diuretic; and, poſſeſſing theſe qualities in much the ſame degree as the ſeeds of cucumbers and melons, are uſed with them in cooling emulſions.

The Bitter Gourd, called Bitter Apple.

THOUGH this plant is a native of warm countries, yet it thrives well enough here in the gardens of the curious. It is a ſmall kind of *gourd*. The ſtalks, like thoſe above deſcribed, are large, angular, and hairy, but theſe are of a pale green. The ſtalks of this plant can no more ſupport themſelves than thoſe of the gourd, but have a number of tendrils, by which they lay hold of every thing that grows near them. The leaves are of conſiderable ſize, and very deeply indented or divided at the edges. The bloſſoms alſo reſemble thoſe of the melon, being large, and of a pale yellow. The fruit is a round gourd, of the ſize of a large orange. The bark of this fruit is hard, and contains a ſpungy ſubſtance, with flat, hard, and oval ſeeds among it.

The internal part of this fruit is imported and ſold as a drug, under the name of *coloquintida:* the outer ſhell is taken off, and the dried pulp, with the ſeeds among it, is ſent to England; but the ſeeds muſt be ſeparated afterwards, and the pulp uſed alone. It operates very violently as a purge, but it may be ſafely adminiſtered under proper caution, and is ſaid to be an excellent remedy for the rheumatiſm, and for violent habitual head-aches.

Perhaps, if ſome of theſe rougher medicines were given in obſtinate caſes, where the conſtitution is robuſt, they might effect cures which are beyond the reach of more gentle and lenient means.

Gout Wort.

THIS wild plant is well known, to the annoyance of the gardener, ſome grounds being over-run with it, and when it has once taken root it is not eaſily extirpated. It grows to the height of two feet. The leaves which riſe immediately from the roots are of conſiderable ſize, and are compoſed each of ſeveral ſmaller, which are placed on a divided rib, like thoſe of angelica, to the leaves of which plant they are not wholly unlike: they are of a light green colour, oblong, and indented at the edges. The ſtalks are round, ſtraight, and ſomewhat branched, ſlender, channelled, and of nearly the ſame colour as the leaves; which, on the ſtalks, are ſmaller, and conſiſt of fewer parts, than thoſe that ſpring from the root. The flowers are white and ſmall, but ſtand together in little round cluſters: each flower is ſucceeded by two flat ſeeds. The root is creeping and fibrous.

The virtues of this plant are only in external uſe; the root and freſh buds of it being applied in fomentations and poultices to eaſe obſtinate pains. The name it has obtained, denotes the reputation it once bore for ſingular efficacy againſt the pains of the gout; but modern experience has taught us to decline every external remedy for that diſorder, though warm applications of this kind, may be of all others the leaſt dangerous. Good effects have been produced by poultices of the roots and leaves boiled ſoft together, and applied to the hip in the ſciatica, and renewing it as it grew cold. Nor is this the only kind of pain in which it may be uſed with ſucceſs; ſuch as are occaſioned by old ſtrains and bruiſes, may be effectually removed by it.

Gromvel.

THIS wild plant is leſs diſtinguiſhed by it's beauty, than by it's ſeeds, which are hard, ſhining, and reſemble pearls, as they ſtand in the open huſk. The plant reaches the height of a yard. The ſtalk is round, large, ſtrong, and perfectly ſtraight, but divides into branches. The leaves are of an oblong ſhape, not broad, but very rough and hairy, and of a deep green colour, almoſt inclining to black: they ſtand in no regular form. The flowers are white, and of inconſiderable ſize; when they fall off, the cups remain, and contain the ſeeds we have already deſcribed. The plant grows commonly in dry ditches, and about hedge ſides.

The ſeeds are moſt uſeful in medicine: they operate powerfully by urine, and are ſaid to be ſerviceable in the gravel, and other obſtructions. They may be given in powder, and the patient ſhould dilute with frequent draughts of barley water at the ſame time. When the ſeeds cannot be had, the juice or decoction of the leaves may be ſubſtituted.

Ground Pine.

THIS is a ſmall wild plant, of a moſſy and ſingular appearance. It does not grow above four inches high. The ſtalks are hairy, and ſeldom erect. The leaves ſtand ſo thick on the ſtalks, two oppoſite each other, that together with the young ſhoots which grow from their boſoms, the ſtalk is in a manner obſcured, and the whole ſeems a thick round tuft. The leaves are ſhort, narrow, and divided into three parts at their ends. The flowers are ſmall, of a yellow colour, and grow at the joints among the leaves: theſe flowers are each ſucceeded by four ſeeds, and the whole plant emits a ſmell highly reſinous. It is found in fallow fields and chalky grounds, and is very common in Kent. It flowers in June and July.

The whole plant may be uſed in medicine, either dry, in powder, or in infuſion. It operates ſtrongly by urine, and promotes the diſcharge of the female evacuations ſo powerfully, as to be dangerous to pregnant women. It removes obſtructions of the liver and ſpleen, and is ſaid to be uſeful in the palſy, gout, jaundice, rheumatiſm, pains in the limbs, and many other chronic diſorders. It is alſo reputed to be a good nervous medicine, and to be an antidote to the ſcurvy.

Groundſel.

THIS weed grows commonly in gardens, fields, and upon walls, and bears ſmall yellow flowers and downy ſeeds; it does not often grow above eight inches high; the ſtalk is round, fleſhy, tolerably ſtraight, and green or reddiſh; the leaves are oblong, remarkably broad at the baſes, blunt, and deeply indented at the edges. The flowers grow in a kind of long cups, at the tops of the ſtalks and branches. It flowers through all the milder months of the year.

The juice of this herb, taken in ale, is eſteemed a gentle and very good emetic, bringing on vomiting without any great irritation or pain. It aſſiſts pains in the ſtomach, evacuates phlegm, cures the jaundice, and deſtroys worms. Applied externally, it is ſaid to cleanſe the ſkin of foul eruptions.

The Guaiacum Tree.

THIS tree is a native of the Weſt-Indies, where it grows to a great bulk; it thrives well in plantations in England, though it does not arrive at any very conſiderable ſize. The fruit is large, and the branches numerous; the leaves are but ſmall, though each of them is compoſed of two or three pair of ſtill ſmaller ones, with no odd leaf at the end. The leaves are ſhort, broad, round, and of a dull green colour. The flowers are ſmall and yellow, growing in large cluſters together; ſo that the tree, when in bloom, makes a very fine appearance: but it ſeldom produces flowers in theſe climates. The ſtem is covered with a hard brown brittle bark; that of the branches is of a lighter colour: the wood is firm and ponderous; and, as well as the bark, of a hot and aromatic taſte.

The bark and wood are uſed medicinally, they are given in decoction, to promote perſpiration, and to cleanſe the blood. It is an excellent remedy againſt the rheumatiſm, gout, dropſy, king's evil, ſcurvy, venereal complaints, and all other diſorders, which ariſe from what is commonly called foulneſs of the blood; but it muſt be perſevered in for a conſiderable time, as it's good effects will not be produced ſuddenly.

Gum Guaiacum is the reſin drawn from this tree; it is black, ſhining, and brittle, and when powdered, of a greeniſh white colour, of an aromatic ſmell, and an acrid and pungent taſte. It ſometimes purges; and, in the rheumatiſm, and many other caſes, is to be preferred to the wood itſelf. This gum is alſo recommended to cure the ſcurvy, and to cleanſe the ſkin of ſcabby eruptions.

Hares Ears.

THOUGH this plant grows wild in ſome parts of Europe, it is only to be found here in gardens. It grows to the height of two feet or more. The leaves are of conſiderable ſize, long, broad, of a ſtiff ſubſtance, and ſomewhat drawn together into a hollow, which gives them the appearance of that ear from which they are named; they are of a very pale green colour, and the ribs upon them ſtand high above the ſurfaces. There is another ſort with narrow leaves, which was formerly uſed in medicine as well as the broad-leaved kind: the ſtalks of this latter are round, upright, channelled, and towards the top divided into branches. The flowers are ſmall, of a yellow colour, and ſtand at the extremities of the branches, in ſmall tufts. The root is long, large, and fibrous.

In the countries where this plant grows wild, the young ſhoots of thoſe leaves which riſe from the root, are eſteemed efficacious in the cure of freſh wounds; two or three of theſe being cut off cloſe to the ground, are laid unbruiſed, one over the other, upon the wound, the lips of it being firſt cloſed, making a kind of compreſs. Theſe are bound on with linen rags, and ſuffered to remain for two or three days; at the end of which time, in moſt caſes, the cure is perfected, and the ſcar only remains. Though this herb has always been reckoned among the vulnerary plants; yet it is not improbable that the cure in this way depends more on cloſing the wound, and excluding the air, than on any particular virtue in the plant; as the ſame thing happens daily in this country, where the leaves of tutſan, and other innocent plants, are applied in the ſame way with equal ſucceſs. The cure of the king's evil, and other ulcers and ſores, was formerly aſcribed to this herb, which was alſo eſteemed an antidote againſt poiſonous bites, and a remedy for internal bruiſes and ruptures.

Hares Foot.

THIS little plant is frequently found wild in fallow grounds, and among corn, it is ſingular on account of the downy pods or tufts which contain the ſeeds, and from whence the name is derived.

It ſeldom riſes high; the ſtalks, which are numerous, round, and ſmall, generally creeping on the ground; they are, however, divided into many branches. The leaves are ſmall, of an oblong ſhape, narrow, hairy, and of a faint green colour; they grow three together, in the manner of trefoil, and are ſet at every joint. The flowers, which are ſmall, are of a pale purple colour, and ſtand ſeveral together in a ſpike of no great length.

The ſtalks and leaves of this plant, dried and made into a ſtrong decoction, are ſaid to be admirably aſtringent, and particularly uſeful in all kinds of fluxes, whether attended with a diſcharge of blood or not; the decoction is alſo recommended to check the overflowings of the uſual female diſcharges, as well as thoſe occaſioned by weakneſs. It is ſerviceable in ulcers of the bladder, and in retenſion of urine, difficulty, heat, and pain in making water.

Harts Tongue.

THIS plant grows wild, in ſhady lanes, and about ſtone buildings, and remains green the whole year. It is of the fern kind; like them, having only leaves without flower-ſtalks, and bearing the flowers and ſeeds on the back of the leaves: but this is the only reſemblance it bears to the ferns, we have deſcribed. Many leaves, each of which appears to be a ſeparate plant, riſe from the ſame root. The foot-ſtalk of the leaf is four or five inches long, but the extreme breadth of it ſeldom much exceeds an inch, being wideſt at the baſe, and growing narrower towards the extremity: this leaf is ſometimes entire, but in other inſtances is divided into two parts towards the point; the upper ſurface of the leaf is of a lively green, the under part ſomewhat more pale, and the foot-ſtalk paſſes quite through the leaf like a rib. The ſeed grows in broad oblique lines on each ſide of this rib, on the under ſurface, and is ſmall, duſty, and brown.

This plant is commonly uſed for diſorders of the liver and ſpleen, and for the rickets in children. It is preſcribed as a good aſtringent to ſtop the bloody flux, and to reſtrain the ſpitting of blood; it is alſo recommended to relieve ſuch as are troubled with convulſive or hyſteric fits, or with the palpitation of the heart. But for any of theſe complaints, it ſhould be perſevered in a proper time; and may either be given in powder or decoction of the dried plant, or in tea, infuſion, or juice of the freſh leaves.

Hartwort.

THOUGH this is a native of the Alps and mountains of Italy, yet it is frequently met with in our gardens. It riſes to the height of a man; and the ſtalk is large, channelled and hollow: the leaves which encompaſs, and as it were ſheath the ſtem, are of conſiderable ſize, and are divided into ſeveral parts, every one of which is again commonly ſubdivided into five different ſhreds, each terminating with three ſmaller leaves oval and pointed; the whole leaves are of a faded green, inclining to yellow. The flowers, which are white, taken ſingly, are of ſmall ſize, but are collected together in large tufts or cluſters on the tops of the ſeveral branches. Each of the flowers is ſucceeded by two large and long ſeeds, channelled on the back, and having a brown leafy border on each ſide. Theſe ſeeds are acrid and pungent to the taſte, and emit a ſtrong ſmell.

Both the leaves, ſtalks, and ſeeds, are uſed medicinally, but chiefly the latter; they act as a warm cordial, relieving colic and windy pains, and promoting the female periodical evacuations, and thoſe after childbirth; they operate principally by urine, and may be given in powder, decoction, or infuſion. Theſe ſeeds compoſe a part of the numerous ingredients of Mithridate and Theriaca.

Hawthorn.

THIS ſhrub or tree, for it ſometimes grows to a very conſiderable magnitude, is too common to require a very particular deſcription. The trunk is irregular, and generally crooked; it has many tough branches ſet alternately with very ſharp thorns, and leaves, on oppoſite ſides of the twigs. The leaves are of a gloſſy green, and are divided into three or five parts. The flowers are ſmall, conſiſting of five white leaves, with reddiſh threads in the middle, and grow in cluſters. It is extremely beautiful, and the ſmell of it is delightful. Theſe flowers are ſucceeded by ſmall round berries of a fine red colour, containing a large ſtone divided into two parts, and but thinly covered with pulp. This ſhrub flowers in May, and the bloſſoms are from thence called *May Flowers*; the berries ripen in September, but hang till after Chriſtmas, if they are not devoured by the birds.

Both the flowers and dried fruit are uſed medicinally, either in decoction or infuſion: they both poſſeſs the ſame virtues, and are eſteemed good diuretics: they are commonly given in the gravel and ſtone, but no great dependence can be placed on their ſingle efficacy; they are alſo recommended in pleuriſies.

Hawkweed.

THIS plant grows commonly in the fields and meadows, and flowers in the ſummer months. The root ſtrikes deep into the earth, and is long, thick, and very little branched or divided; the leaves lie flat on the ground round the root, and are rough and ſomewhat hairy, obtuſe at the extremities, and deeply indented, or divided into ſeveral parts. The ſtalks are tall, tough, and branched, and bear ſeveral flowers at the tops reſembling thoſe of dandelion, but ſmaller; they are alſo of a yellow colour, and like them turn into down when the flowers wither, and cover long and ſlender ſeeds.

This plant is in ſo many reſpects like the dandelion, that it is generally ſuppoſed to be of the ſame kind, and to poſſeſs nearly the ſame opening, diuretic, and cooling qualities.

Hedge Muſtard.

THIS plant grows every where by the way ſide, and upon old banks, hedges, and walls. The ſtalk riſes to be a foot and a half, or two feet high; and is round, tough, and pliant, in general not ſtraight, but branching out in a great variety of diviſions, like a buſh or ſhrub. The leaves which grow on the lower part of the ſtem are long and narrow, and divided into ſeveral jagged ſhreds ſet oppoſite to each other, with one at the end more obtuſe than the others. As the ſtalk riſes, the leaves have fewer diviſions, ſometimes only three. The flowers are ſmall, being compoſed of only four leaves, and of a yellow colour; as they are ſet on each ſide the ſtalk, and flower gradually as the ſpike ſhoots up, ſo the ſtalk is frequently ſeen full of ſeed-pods on the lower part, and of flowers at the top. Theſe ſeed-veſſels are round, ſharp-pointed, ſtand cloſe to the ſtalk, and contain a great number of ſmall hot and pungent ſeeds.

An infuſion of the whole plant is recommended in complaints which affect the breaſt, ſuch as aſthma, oppreſſion of tough phlegm, cough, and hoarſeneſs, a ſtrong infuſion of it may be boiled to a ſyrup, in which way it's virtues will be preſerved through the year.

Hemlock.

THIS weed has always been eſteemed a deadly poiſon, till within a very few years that an ingenious foreign phyſician introduced the internal uſe of it, ſince which time it has acquired ſome degree of reputation.

It is a tall handſome plant, frequently riſing to the height of four or five feet. It has ſmooth, round, and hollow ſtalks, marked with large black or purple ſpots, and bears many large winged leaves which are ſubdivided into numerous ſmaller parts like fern, but finer. On the tops of the branches grow large cluſters of white flowers, each conſiſting of five leaves, and theſe flowers are ſucceeded by whitiſh ſeed deeply channelled. The root is large and woody. It grows in old deſerted gardens, under hedges, and among rubbiſh, and flowers in the middle of ſummer; the whole plant ſmells offenſively.

Hemlock has been anciently preſcribed in poultices to diſperſe hard ſwellings; but the moderns, as we have before obſerved, have ventured upon the internal uſe of it. It has been aſſerted to be ſpecific in the cure of cancers and ſcrophulous diſorders, and treatiſes have been written on it's virtues, in ſupport of which many ample teſtimonies have been adduced.

The dried leaves are directed to be powdered, and given at firſt in very ſmall quantities, which are to be increaſed as the patient can bear it: large doſes at the beginning are apt to occaſion faintings, giddineſs, ſtupefaction, and even loſs of intellects.

Hemp.

THIS plant ſometimes grows to the height of five or ſix feet. The ſtalk is ſtout, angular, and covered with a thick tough bark, for which it is principally cultivated. The leaves are numerous and large, being compoſed of ſix or ſeven ſmaller ones, which ſpread like the fingers of the human hand, and are long, narrow, ſharp-pointed, finely indented about the edges, and are rough to the touch, and green above, but white or hoary underneath. The flowers and ſeeds are produced by different plants: that which bears the flowers, which are ſcarce obſervable, producing no ſeeds; and the female, or ſeed-bearing plant having no flowers. The ſeed is large, round, ſmooth, of a greyiſh white colour, and containing a white oily pulp.

The ſeeds only are uſed medicinally. Theſe being made into an emulſion, or boiled with milk till they crack, are ſaid to be a cure for the jaundice, and to relieve old and obſtinate coughs; this emulſion has alſo been recommended to waſh the face after the ſmall-pox, to efface the marks, and the oil expreſſed from the ſeeds is ſaid to be a cure for burns.

Hemp Agrimony.

THIS plant grows by rivers, and in other watery places. The root is ſpreading, ſtringy, and fibrous; and the ſtalks, which ſometimes riſe near three feet high, are angular, of a reddiſh colour, and ſomewhat woolly: at each joint ſtand two leaves, divided into long, narrow, indented parts, reſembling hemp; like which, alſo, the leaves are green above, and white beneath. The flowers are of a bright red colour, and grow in large cluſters at the tops of the branches, which are compoſed of a great number of ſmall, ſlender, naked flowers, divided into five parts at the tops, and each ſucceeded by a downy ſeed.

A decoction made of the root, boiled in ale, and taken in ſmall quantities, is ſaid to act as a gentle purgative; but in large doſes it operates more violently by ſtool, and by vomit alſo, though without producing any bad effect; it has the reputation of being a cure for dropſies, of affording relief in coughs and catarrhs, and of correcting bad habits of body. It is eſteemed a good vulnerary herb, and is ſaid to cure both external and internal wounds.

Black Henbane.

COMMON *black henbane* is found near the highway ſides, and on the banks of ditches and other undiſturbed places in moſt parts of the kingdom. It grows to the height of two or three feet, and has thick, large, round hairy ſtalks, clammy to the touch, and of crooked and unſhapely growth. The ſtalks are thick ſet with large and long leaves, which are ſoft, hairy, and clammy, ſharp-pointed at the ends, finely indented at the edges, and of that green colour which has a bluiſh caſt: theſe leaves are of a very diſagreeable ſmell, and render the hands offenſive after touching them. The flowers, which are bell-ſhaped, and of a yellowiſh brown colour, veined with purple, and having purple chives in the middle, grow ſeveral together on the tops of the branches, the flower-ſtalk continuing to riſe as they blow. The ſtalk is extended to a conſiderable length, the ſeed-veſſels ſtanding under each other in different progreſſive ſtages to maturity. The flowers are ſucceeded by many ſmall flat brown ſeeds. The root is rather long and thick, and not ſo diſagreeably ſcented as the leaves.

The ſeed only is uſed internally, and this is given in ſmall quantities in bloody fluxes, and other internal hæmorrages, though ſeldom alone, being generally made into an electuary with conſerve of roſes; and ſometimes with the addition of white poppy ſeeds.

But the leaves of this *henbane* are commonly applied externally, as an emollient, cooling, and anodyne poultice; in which way they are uſeful to check inflammations, as well as in an ointment made with lard. A vulgar notion prevails, that pieces of the root ſtrung like beads, and hung round children's necks, aſſiſt them in breeding their teeth eaſily. The root is in a degree poiſonous, and is never uſed internally.

White Henbane.

THE *white henbane* is a native of warmer climates, being found wild in Italy, and ſome parts of Germany; but with us is only to be met with in gardens.

It differs principally from the common *black henbane*, in being of ſmaller ſize and leſs woolly; in the leaves being broader, but ſhorter, and leſs jagged or indented; ſtanding on longer foot-ſtalks, and not being altogether ſo offenſive to the ſmell. This plant alſo bears fewer flowers, and theſe are inferior in ſize to thoſe of black henbane, and are of a pale yellow colour without the purple veins. The ſeeds are alſo of a lighter colour.

The ſeeds of this ſpecies of henbane, are generally directed to be uſed for the ſame complaints as the other, becauſe they are ſuppoſed to be more mild in their operation; though it is probable no very ill conſequences have ever happened from adminiſtering the ſeeds of the common henbane, inſtead of thoſe of the white; which, as they are much more eaſily obtained, has no doubt frequently happened.

Good Henry, Good King Henry, or Engliſh Mercury.

THIS has obtained the latter name, to diſtinguiſh it from *French Mercury*, which has been already deſcribed, and to which it is allied.

This plant grows in waſte places, about farm yards, and among rubbiſh. It ſeldom exceeds a foot in height. The ſtalk is round and large, but ſeldom ſtraight; it is covered with a kind of glutinous or unctious powder, of a greyiſh colour. The leaves, which ſtand upon long footſtalks, are of a triangular ſhape, pointed like ſpinnage, of a pale or rather faded green on the upper ſurface, but covered beneath with the ſame kind of greaſy matter as the ſtalks; the leaves which grow on the ſtalk differ only in ſize from the others; the flowers, which appear in the ſpring, grow on long ſpikes at the tops of the branches, are of a yellowiſh green, and are ſucceeded by round, black, and ſhining ſeeds.

The young ſhoots of this plant, before it flowers, are recommended to be eaten as ſpinnage or aſparagus, and in this way are ſaid to be opening, cooling, and cleanſing: it operates alſo by urine, and is eſteemed a remedy for the ſcurvy. A cataplaſm of the leaves was formerly preſcribed to abate gouty pains; but, as we have already obſerved, external applications have long been diſuſed in that diſorder; a decoction, however, is ſtill made of the dried leaves for clyſters.

Holyoak or Hollyhock.

THIS is a very tall flower, growing frequently in our gardens to the height of ſeven or eight feet. The ſtalk is thick, rough, round, and ſtraight. The leaves large, indented, rough, and ſomewhat hairy. The flowers, which in the ſingle ſort are compoſed of one leaf divided into five parts, are of different colours, (red, white, purple, and pale yellow) on different plants. The root, which is large, white, and branched, is full of a ſlimy juice, and not very diſagreeable to the taſte.

This is a mallow, poſſeſſing nearly the ſame virtues as the common and marſh mallow, which will be mentioned hereafter: but not in the ſame degree as either; being more powerful than the former, and leſs efficacious than the latter.

Honewort.

THIS plant grows wild in many parts of the kingdom, and is found in corn-fields, and other dry places. The root is long, and white within: a few leaves, ſeldom exceeding half a dozen in number, ſpring from it in the early part of the year, and ſpread themſelves regularly on the ſurface of the ground round the root. Theſe leaves are from ſix to eight inches long, but the breadth is little more than one fourth part of the length: each leaf is compoſed of a double row of ſmaller ones, placed on each ſide a rib, and terminated by a ſingle leaf; theſe ſmaller leaves are alſo oblong, of breadth proportioned to the length, and elegantly indented at the edges; they are of a lively green colour, and the whole plant is ſo beautifully formed and diſpoſed, that it is not eaſily miſtaken for any other. All the leaves die away in the ſummer; towards the cloſe of which, a round, hollow, ſtraight ſtalk, ſhoots up from the root, which branches towards the top, and bears leaves ſomewhat reſembling thoſe which ſpring from the root, but without the diviſions into ſmaller ones. On the tops of the branches grow ſmall white flowers, each of which is ſucceeded by two ſmall ſeeds flat and channelled.

The freſh leaves beat into a poultice, and applied to hard, inflamed, and troubleſome ſwellings, are ſaid to cool and diſperſe them: they muſt be frequently renewed. They have alſo had the reputation of diſpelling ſcrophulous tumours, but we cannot ſpeak of their efficacy in this particular from our own knowledge.

Honey Suckle.

THIS beautiful ſhrub adorns the woods and hedges of every part of the kingdom. The trunk or ſtem ſeldom or ever exceeds the bigneſs of a man's wriſt. The branches are ſlender and pliant, laying hold of any other plant that grows near it, and twiſting themſelves round it's limbs. The young ſhoots are brittle, and of a reddiſh colour. The leaves grow in pairs at the joints, and are broad and roundiſh, but ſomewhat pointed at the extremities, and of a dull green with a bluiſh caſt. The flowers grow in bunches, compoſed of long ſlender tubes of a pale reddiſh colour, and of delicious ſmell; theſe are ſucceeded by round red berries.

A decoction of the leaves is recommended for coughs and aſthmatic complaints, to remove obſtructions of the liver and ſpleen, and as a gargle for a ſore mouth and throat; and an oil collected from a ſtrong infuſion of the flowers, is ſaid to relieve the cramp and nervous convulſions.

Honey Wort.

THOUGH this plant is a native of the warmer parts of Europe, it is frequently cultivated in our gardens.

When the ſtems are ſupported, this plant grows to the height of two feet, but in theſe climates it is too feeble to rear it's head without aſſiſtance. The ſtalk is of moderate ſize, round, full of juice, and brittle. The leaves are of conſiderable bigneſs, of an oblong ſhape, and ſo broad at the baſe, as to ſurround and incloſe the ſtalk; they are of a faint or bluiſh green colour, and are thick ſet with ſmall and ſharp prickles, and the whole ſurfaces of them are blotched or ſpotted in an irregular manner, with white. Among the cluſters of leaves at the tops of the branches, grow the flowers, which are of a yellow colour, ſtreaked with purple towards the middle, and of an oblong ſhape, hollow, wide, and open at the mouths. At the bottom of each of theſe flowers is a drop of liquor of a honey-like taſte, from which circumſtance the name is derived.

An infuſion of the freſh tops of this plant, is recommended as a remedy for the jaundice and ſcurvy, being of a cooling nature, and operating chiefly by urine.

Hops.

THESE plants, which grow wild on the hedges in many parts of Great-Britain, and are alſo much cultivated, run to a very conſiderable height, climbing round trees and ſhrubs in the former ſtate; and in the latter, round poles placed on purpoſe for their ſupport. The ſtalks are round, ſometimes green, and ſometimes inclining to purple, hairy, and rough to the touch. They bear leaves ſhaped like thoſe of the vine, divided into three parts, and each finely indented at the edges, of a deep green colour, and nearly as rough as the ſtalks. At the extremities of the ſtalks grow the hops, in large, looſe, and ſcaly bunches, of a pale and greeniſh yellow colour, when they are at maturity, at which time alſo they emit a ſtrong and grateful ſcent.

A decoction of hops freſh from the plant, has been recommended to cure the jaundice, and the powder of them, after they have been dried in an oven, is ſaid to be of great uſe in agues. A pillow filled with hops is reported to allay the frenzy occaſioned by fevers, and to procure ſleep, and they are alſo preſcribed to remove obſtructions, and promote the female periodical diſcharges.

The young ſhoots, or as they are commonly called hop-tops, eaten as aſparagus, are accounted extremely wholeſome, being gently opening, diuretic, and cleanſing.

White Horehound.

THIS plant, grows by the ſides of roads, in lanes, and other dry places in many parts of the kingdom. It riſes to the height of fifteen or ſixteen inches. The ſtalks are ſquare, white, or hoary, and very ſtrong, of a pale colour, and erect. The leaves, which ſtand two at each joint, and have pretty broad foot-ſtalks, are ſhort and wide, obtuſe at the ends, and indented at the edges; they are rugged, white, and hoary like the ſtalks. The flowers grow among the leaves, are white, and the points of their cups prickly; they appear in June. The root is woody, hard, and fibrous.

The parts of the plant uſed for medicinal purpoſes, are the leaves and the tops of the young ſhoots: a very ſtrong decoction of theſe, made into a thin ſyrup with honey or ſugar, is ſaid to be excellent in relieving coughs, hoarſeneſſes of long ſtanding, and diſorders of the lungs; and taken in more conſiderable doſes, promotes the female periodical diſcharges, removes obſtructions, and is particularly ſerviceable in dropſies, jaundice, and green ſickneſs.

Black Horehound.

THIS plant, from it's diſagreeable ſmell, is called by ſome *ſtinking horehound*. It is a taller plant than the white horehound, and more branched. The ſtalks are ſquare, and hairy; and bear leaves larger than thoſe of the white horehound, in ſhape not unlike them, but of a darker colour, and ſomewhat more ſoft to the touch. The flowers grow among the leaves in two cluſters, one on each ſide the ſtalk, each cluſter having a common foot-ſtalk; the flowers are red. The whole plant is of a diſagreeable appearance. The root is fibrous, and ſpreads much. This alſo grows by road ſides, and under dry hedges, and flowers in July.

The plant may be uſed freſh, or dried. The leaves bruiſed and mixed with ſalt, are ſaid to cure wounds inflicted by mad animals; given in form of tea, it is recommended to promote the female evacuations; and as a remedy in hyſteric caſes, faintings, convulſions, and low ſpiritedneſs, and all the train of hypochondriac diſorders.

Horſetail.

THIS common and wild plant, of which there are ſeveral ſorts, is frequently found in our corn-fields, and appears to be compoſed of branches only without leaves. It grows to the height of a foot or more, and is much branched; the ſtalk is round, neatly channelled, and compoſed of many joints. It is hollow, feeble, and can ſeldom ſupport itſelf tolerably upright; each joint is ſet or articulated into that next under it, and theſe ſtalks are ſurrounded at every joint, with a great number of long, ſlender rough leaves, which are jointed one within another like the ſtalks, and ſtand ſo thick that the whole ſtalk appears like a horſe's tail.

The whole plant is of a green colour, and emits a diſagreeable ſmell when bruiſed. It is found alſo in ditches and marſhy grounds.

Every part of this plant may be uſed, and it is beſt freſh; though it retains a great part of it's virtue in a dried ſtate: it may be given in decoction, to ſtop overflowings of the periodical diſcharges, and other internal hæmorrhages; applied externally, it immediately ſtops the bleeding of wounds, and heals them; and it has been given with ſucceſs in ulcerations of the kidnies or bladder.

Hounds Tongue.

THIS plant is common in hedges, and by way ſides, it is ſaid to have recived it's name from the particularity of it's ſmell, which has been ſuppoſed to reſemble that of a kennel of hounds. It grows to the height of two feet and a half, or three feet. The ſtalk is angular, ſtrong, and erect. The leaves which ſpring from the root are a foot long, and two or three inches broad, of a pale whitiſh or bluiſh green colour, ſoft and woolly to the touch, ſharp at the points, and not indented at the edges; thoſe on the ſtalks anſwer the ſame deſcription, but are ſmaller. The flowers are ſmall, and of a dark purple colour, or rather a dull red; they grow ſeveral together at the tops of the branches, appear in July, and are followed by rough ſeeds.

The root is uſed in medicine: it is long, large, and of a browniſh colour without, but white within; it is ſaid to be balſamic, and aſtringent. Taken in decoction, it is recommended to allay coughs ariſing from ſharp humours; dried and powdered, it is preſcribed to ſtop violent purgings, and the overflowing of the female diſcharges. It is alſo reputed to be a good vulnerary herb, and to poſſeſs virtue in diſpelling ſcrophulous tumours, in which caſe it may be applied externally, and a decoction of it taken at the ſame time.

Great Houſeleek.

THIS plant is ſo well known by it's peculiar manner as well as the place of it's growth, that it needs little deſcription. It grows in cluſters of a roundiſh figure, and theſe are compoſed of leaves, large towards the bottom, and ſmaller towards the extremities; they are thick and very full of juice, broad at the baſes, growing ſharp towards the points, flat on the upper ſurface, a little rounded beneath, and rather hairy at their edges. The ſtalk riſes to the height of ten inches, is very large, ſtraight, round, and juicy; of a reddiſh colour, and divided at the top into branches: the leaves on it are more thin and narrow than thoſe from the root. The flowers are numerous, and grow in ſpikes on the tops of the branches; they are of a ſtarry appearance, of a red colour, and have a green head in their middle, which afterwards forms a cluſter of ſeed-veſſels, incloſing a number of very ſmall ſeeds. It grows on the tops of houſes in moſt parts of England.

The leaves are uſed medicinally. They may be applied externally in inflammations, burns, ſcalds, St. Anthony's fire, and the ſhingles. They are alſo uſeful in other caſes where cooling things may be employed. The juice is ſaid to be cooling and aſtringent taken inwardly, though it is not often uſed in this way. It is likewiſe recommended for inflammations of the eyes.

There is alſo another *houſeleek* unlike the laſt mentioned in form, but poſſeſſing nearly the ſame virtues; this plant is diſtinguiſhed from the other, by the name of the *leſſer houſeleek*; the ſtalks are round, ſlender, and reddiſh, and do not grow above ſix inches high. The leaves are long and round, not flat like other leaves. The flower ſtalks are of a bluiſh green colour, and have a few leaves like thoſe already deſcribed. The flowers are white, and ſtand in tufts or umbels at the tops of the ſtalks. This alſo grows on old walls, and the tops of houſes, like the greater.

The Leaſt Houſe Leek, Stonecrop, or Wall Pepper.

THIS plant, which alſo grows commonly on old walls, is of kin to the two preceding, but differs from both in appearance and virtues. The root is ſmall, from whence grow abundance of round ſtalks: being weak and unable to ſupport themſelves, they ſpread every way about, and extend to the length of ſix inches. The greateſt part of the ſtalk is covered with leaves, ſo that it has the appearance of a green ſubſtance, about the ſize of a man's little finger; theſe leaves are ſhort and thick, of a lively green colour, broad at the baſes, and ſharp at the points. The flowers are ſmall, and of a bright yellow; they grow in great numbers at the extremities of the branches, and reſemble in ſhape thoſe of common houſeleek. It flowers in May and June. The root is ſmall and fibrous, and the whole plant is of an acrid pungent taſte.

This kind of *houſeleek* is more apt to increaſe than leſſen inflammations; it ſhould therefore be carefully diſtinguiſhed from the other ſorts: but the juice of this is excellent againſt the ſcurvy, and other diſeaſes ariſing from what is called foulneſs of blood. A courſe of it has alſo been recommended for the king's evil. It may be taken in ſtrong decoction.

Hyſſop.

THIS plant, though not of Britiſh growth, is kept in gardens for it's virtues. It ſometimes grows two feet high: the young ſtalks are ſquare, ſtrong, erect, and of a pale green colour; as they grow older they become round and woody. The leaves, which ſtand two at each joint, are long, narrow, pointed at the ends, and of a lively green colour. The flowers are ſmall, and ſtand in long ſpikes at the extremities of the branches; they are of a beautiful blue colour. The root is thick, woody, and much divided; and the whole plant has a ſtrong aromatic ſmell.

Hyſſop may be gathered and dried when it is juſt beginning to flower. An infuſion or tea made of it, is not diſagreeable; and this ſeems the beſt way of taking it. It is an excellent remedy for coughs, hoarſeneſs, aſthmas, obſtructions in the breaſt, difficulty of breathing, colds, and diſtempers of the lungs. A ſtrong infuſion boiled into a ſyrup with honey or ſugar, will anſwer the ſame purpoſes, and may be adminiſtered with an equal quantity of oil of almond.

Hedge Hyſſop.

THIS little plant is kept in our gardens, but is a native of the Alps, and other mountainous parts of the continent of Europe. It grows a foot high; and has creeping roots, from whence riſe ſquare, ſlender, and not very ſtout ſtalks: the leaves, which reſemble thoſe of common hyſſop, and are ſet at every joint, are long, narrow, and ſharp-pointed. The flowers are long, of moderate ſize, and a yellow colour; they grow from the boſoms of the leaves, on ſhort foot-ſtalks, and are hollow and but little divided at the ends. They reſemble in ſome meaſure the flowers of *fox-glove*.

The plant is but little uſed in this country, though a decoction of it freſh is ſaid to be an excellent but ſomewhat violent purge, and is recommended to ſtrong conſtitutions in dropſies, rheumatiſms, and the jaundice.

Jack by the Hedge, or Sauce alone.

THIS is an annual plant, which periſhes every year; but makes a figure in the ſpring, and is common in our hedges. The root is ſmall, white, and woody; the ſtalks riſe to the height of three feet, and are ſlender, channelled, hairy, and very ſtraight. The leaves, which ſtand on long foot-ſtalks, are large, broad, ſhort, and roundiſh; and thoſe which grow on the ſtalk ſomewhat pointed at the extremities, and waved at the edges. They are of a pale yellow green colour, thin and ſlender, and being bruiſed, ſmell like onions or garlic. The flowers, which ſtand ten or a dozen together at the tops of the branches, are ſmall and white, conſiſting each of four leaves; theſe are followed by ſlender pods, containing ſmall longiſh ſeeds. It is found in hedges, and on bank ſides, and flowers in May.

The leaves are of a hot nature, and being eaten as ſallad, operate powerfully by urine, and are recommended in dropſies. The juice of the leaves, boiled into a ſyrup with honey or ſugar, is preſcribed to break tough phlegm, and to cure old coughs and hoarſeneſſes. It is alſo ſaid to be an antidote againſt poiſonous and contagious diſeaſes; and the leaves, bruiſed and applied externally, are reputed to reſiſt the ſpreading of mortification and gangrene.

The Jacinth, Hyacinth, Harebell, or Blue-bell.

THESE flowers are found in immenſe quantities in old grounds, among low woods, and in thickets, in every part of England. The root is white, round, and bulbous, and about the ſize of a large filbert. The leaves are narrow and graſſy, but of a dark green colour, and ſmooth ſurface: among the leaves riſes a long, ſmooth, brittle, round ſtalk, without leaves, and bearing a ſpike containing ſix or ſeven flowers, which are large and of a beautiful blue; hollow, oblong, and turning up at the rim. The whole ſpike hangs down it's head.

The root, which is the only part uſed, and this but rarely, in medicine, abounds in a ſlimy juice, but muſt be carefully dried; the decoction of it operates well by urine, and the powder is balſamic and ſomewhat ſtyptic. It's virtues are not much known; but it is ſaid to poſſeſs alſo an aſtringent quality, and to be a good remedy for female weakneſſes.

Jeſſamine.

THIS beautiful ſhrub ornaments almoſt every garden. It ſhoots out long, ſlender, and green twigs, unable to ſupport themſelves; ſo that it is commonly nailed againſt walls, unleſs it is confined to a very ſmall ſize. The trunk is covered with a grey bark, but the young ſhoots are green. The leaves ſtand two at each joint, oppoſite to each other, and are extremely beautiful; each being made up of about three pair of ſmall, narrow, oblong, and pointed leaves, with one at the end longer than the reſt; they are of a dark but clear green colour. The flowers come forth among the leaves ſeveral together, on a common foot-ſtalk, they are long, hollow, open at the end, and white; they ſtand in very ſmall cups, ſo that they eaſily fall off when they are full blown: they are highly and deliciouſly fragrant. Theſe flowers are ſucceeded by divided berries; which ripen in the warmer countries, but ſeldom come to maturity here.

The flowers are uſed medicinally; and a ſtrong infuſion may be made, by pouring a pint of boiling water upon ſix ounces of the freſh gathered and clean-picked bloſſoms of *jeſſamine*; after it has ſtood twelve hours, it may be poured off, and honey or ſugar enough added to make the liquor into a thick ſyrup: in this way, it is ſaid to be an excellent medicine for a cough and difficulty of breathing, and a ſtrong decoction has been recommended to warm and relax the womb, and facilitate childbirth.

Jews Ears.

THIS is a fungus, or as it is more commonly called a toad-ſtool, which grows upon old elder-trees. It is about an inch and a half in length, and generally about an inch broad, and is conceived to have ſomewhat of the ſhape of a human ear. It adheres by a broad baſe to the bark of the tree, and from thence gradually ſpreads into a flat, hollow ſubſtance, with ſeveral ridges in it, running irregularly; it's colour is a pale grey on the outſide, and darker within, and there run ſeveral ribs along it. Dried, and boiled in milk, it has been ſtrongly recommended in ſwellings and inflammations of the throat, and in quinſies. The *Jews-ear* has at preſent loſt it's reputation; but that ſeems owing to ſophiſtication, another fungus being ſold under the name of it, which grows to a great magnitude, overſpreading decayed trees in damp places. The Covent Garden market is ſaid to be ſupplied from the water-pipes at the New River Head, Iſlington, but ſuch amazing quantities of it are produced in every part of the kingdom, that thoſe who chuſe to impoſe on the public, will be at no loſs to find it.

St. John's Wort.

THIS plant is common in paſture-grounds and hedges, among buſhes, and in other dry places. It is a ſtout plant, growing to the height of a foot and half. The ſtalk, which is round, ſtrong, large, and exceedingly erect, is very much divided into branches towards the top. The leaves, two of which grow without foot-ſtalks, at every joint, are ſhort and blunt at the points, and have three pretty large veins running on the back ſide of each; they are of a bright green colour, and upon being held up againſt the light, ſeem to be full of ſmall holes like thoſe made by a pin. The flowers, which are large, and of a bright and beautiful yellow, are very numerous on the tops of the branches: they are full of yellow threads, which if rubbed between the fingers emit a blood-like juice. The ſeed-veſſel is longiſh, and angular, ſomewhat reſembling a grain of barley; this is divided into three parts, each of which contain ſeveral very ſmall brown ſeeds: it ſmells reſinous.

The flowers and the flowery tops of the plant, juſt before they begin to ripen for ſeed, are uſed medicinally. A tincture of the former, in ſpirits of wine, is ſaid to be a remedy for madneſs and melancholy: and a decoction of the latter, which works powerfully by urine, is preſcribed for the gravel, and in ulcerations of the urinary paſſages; it is alſo recommended to cure agues, and deſtroy worms. Externally uſed, the flowers and tops may be gathered freſh, and bruiſed; and in this way are good for bruiſes, and wounds: in the former they take off the blackneſs; and, in the latter, ſtop the blood, and ſerve as a healing balſam.

The White Stock July Flower.

THIS is a ſtrong plant, kept in gardens for it's flowers, which are variegated and doubled by cultivation. It grows to the height of two or three feet. The ſtalk is ſtrong, large, round, and of a grey colour. The leaves are long, narrow, ſomewhat hairy, and whitiſh. The ſtalks from which the flowers immediately blow, are of a whitiſh, green, and tender. The flowers are nearly the ſize of a ſhilling, beautifully white, and of a delicious ſmell. The ſeed is flat and round, and grows in long hoary pods, divided in the middle by a long partition.

The flowers are ſometimes uſed in medicine, though not often; they are to be freſh gathered, as ſoon as they blow. An infuſion of them is ſaid to be a ſerviceable lotion for ulcers and chops in the fundament; and is alſo preſcribed internally, to promote the female diſcharges. It operates by urine. An ointment may be made by boiling them in hogs lard, which is highly recommended for excoriations, and in particular for ſore nipples.

The Juniper Shrub.

THIS ſhrub is commonly found on heaths, in ſeveral parts of England. It is here generally low, but in ſome other parts of Europe, and particularly in Norway, it riſes to a conſiderable large tree. The bark is of a brown colour, inclinable to red. The branches are tough, and thick ſet with longiſh very narrow and ſtiff leaves, pointed and prickly at the ends, and of a bluiſh green colour. The flowers, which are of a yellowiſh colour, and full of threads, are ſmall and inconſiderable. The berries are round, green the firſt year, and when ripe of a dark purple or black, and each of them contains three cornered ſeeds: they are of a ſtrong and rather diſagreeable ſmell, and of a ſweetiſh reſinous taſte.

The wood, berries, and gum, are uſed medicinally; the two latter are generally imported from Germany. The wood is ſaid to be of uſe, burnt in times of prevailing contagions or peſtilential diſeaſes: the gum has been burnt upon coals, and the fume received up the noſtrils, by ſuch as are troubled with catarrhs, or defluxions in the eyes and noſe. The berries diſpel wind, and work by urine; and are particularly recommended in thoſe colic pains, which are occaſioned by gravel and ſtone. Theſe alſo make the true geneva; but the liquor commonly drank under that name, is only malt ſpirit, to which oil of turpentine is added, to give it the taſte of juniper-berries.

Ivy.

THIS very common ſhrub climbs about old trees, or upon old buildings, inſinuating itſelf by ſhort fibres into trees or walls; and for want of ſuch ſupport, it ſometimes runs on the ground; it rarely bears any fruit in that ſituation. The trunk is large, brown, and covered with a bark of peculiar roughneſs. It is divided into a great number of branches, which are ſlender and brittle. The leaves, which are dark green, are of various ſhapes, oblong, angular, pointed or divided. But it has been obſerved, that the leaves of thoſe plants which have the ſupport of a wall, are more uniform, being generally round, and ending in one point. The flowers, which grow in little round cluſters, are of a yellowiſh colour, but ſmall and inconſiderable; the berries which ſucceed them are large, black when they are ripe, and contain each ſeveral angular ſeeds. It flowers late in the year, and the berries do not ripen till towards the end of January.

Both the leaves and berries are ſometimes uſed, but neither are in very great reputation. A decoction of the former is ſaid to deſtroy vermin in children's heads, and to heal the ſoreneſs they occaſion. The leaves are alſo uſed to cover iſſues that are inclined to inflammation. The berries are purging, and may be taken in an infuſion, which will alſo ſometimes work by vomit, but not prejudicially. They are preſcribed as a remedy for rheumatiſms, and pains of all kinds in the limbs; and the infuſion is ſaid to have cured dropſies, but this is probably ſomewhat doubtful.

In the warm countries the *ivy* emits a kind of gum, which has been uſed externally to take out ſpots and freekles from the ſkin, but it ſhould be applied with caution, as it is of a cauſtic nature, and may excoriate the ſkin.

Kidney Wort, or Navel Wort.

THIS plant grows on old ſtone walls and buildings in ſome parts of England. It is ſeldom above eight inches high, and is remarkable for a cluſter of round leaves growing about the ſtalk. The root is thick and knobbed, and has many fibres growing from the bottom. The leaves, which are thick, fleſhy, and indented at the edges, ſtand on long and ſtout foot-ſtalks, which, except in thoſe that ſpring immediately from the root are inſerted not at the edges of the leaf, but in the middle. The ſtalk which bears the flowers is alſo large and round, and towards the top, divided into ſeveral branches, on which the flowers, which are oblong, hollow, and of a greeniſh white colour, grow in ſpikes; each flower is ſucceeded by two little horned veſſels, full of male ſeeds.

The leaves are uſed medicinally; and applied externally, are cooling, and afford relief in violent pains. Being bruiſed, they are uſed in the piles with great ſucceſs. The juice of them taken internally, operates by urine, and is reputed to remove ſtranguries, and give relief in the gravel, and inflammations of the liver and other inteſtines.

Knap Weed.

THIS is a common wild plant. It grows two feet high. The ſtalks are round, but ribbed: of a paliſh colour, very ſtrong and erect, and divided towards the top into branches. The leaves, which are darkcoloured, are of equal length and breadth; thoſe which ſtand upon the ſtalk are however ſtill broader. The flowers large, of a purple colour, and ſtanding in ſcaly heads, appear like thiſtles; and one of theſe is placed at the top of every branch: though theſe flowers may be thought to reſemble thiſtles at firſt ſight, yet on examination they will be found to be more like *bluebottles.*

The whole young plant is uſed in medicine freſh. It is recommended in decoction to ſtop the bleeding of the piles, and to reſtrain bloody purgings and other internal hæmorrhages. A ſlight infuſion is preſcribed as a gargle for ſore throats: and it may be very properly added to decoctions of the various aſtringent plants which are found wild in Great-Britain; but is not of itſelf ſufficiently efficacious to be depended on without other help.

Knot Graſs.

THIS plant is found wild in fields, by way-ſides, and in hedges. There are ſeveral kinds of it, but the form and virtues of one will include the whole: the largeſt is the moſt commonly uſed. The ſtalks of this are nine or ten inches long, round, jointed, and of a dark green colour. The leaves are of an oval form, but ſharp-pointed, ſet alternately on ſhort foot-ſtalks of a bluiſh green colour, and not indented at the edges. The ſtalks generally recline upon the ground, and one only proceeds from each joint; from which alſo riſes a ſmall white flower, ſomewhat tinged with reddiſh. The ſeed is ſingle, black, and triangular; the root long, large, and running deep into the ground.

A decoction of this whole plant, including roots, ſtalks, and leaves, is recommended as a very good aſtringent; and is reputed to be uſeful in ſtopping all kinds of bleedings, whether internal or external, and in particular, againſt the bleeding piles, and the overflowing of the monthly diſcharges. It is alſo ſaid to be a very ſerviceable waſh for inflamed and bloodſhot eyes.

Ladies Mantle, or Bears Foot.

THIS little plant is a native of ſome parts of England, but is not very commonly found in a wild ſtate. The leaves, upon their firſt ſpringing up from the root, are plaited or folded together, from which circumſtance it has it's name: as they expand, they are broad and of a roundiſh figure, but indented deeply into eight parts, and each of thoſe is again more finely and elegantly indented about the edges. Theſe leaves are of a whitiſh green colour, covered with a fine down, and nearly as broad as the palm of a man's hand. They ſtand upon foot-ſtalks of an inch or two long. The flower ſtalks grow from the midſt, and are round, ſomewhat hairy, about eight inches long, ſeldom upright, and of a pale green colour. The leaves on theſe ſtalks are ſmaller, and have ſhorter foot-ſtalks than thoſe which ſpring from the roots. The flowers which grow in cluſters at the tops of the ſtalks, are ſmall, and of a greeniſh colour. They are compoſed of eight leaves each, and have many yellow threads in the middle. The root is long, large, of a dark colour externally, and has many fibres. It flowers in May, but is ſeldom found near London.

The root and leaves are both valuable; a decoction of the former, freſh taken up, is ſaid to be an excellent remedy for the overflowings of the monthly evacuations, for bloody fluxes, and other internal bleedings; and, being dried and powdered, not only anſwers the ſame purpoſes, but is alſo a remedy againſt common purgings. The leaves are ſometimes applied to women's breaſts, to give them firmneſs, or to reſtore their forms after they have been ſwelled with milk.

The Larch Tree.

THIS tree is a native of Italy, the Alps, and the mountains of the Tyrol and Carinthia. It is of a moderate height, and in ſummer makes a very beautiful appearance; but it's leaves fall off in the winter, though it is a tree of the reſinous kind, and in many reſpects reſembles the *fir* and *pine*. It is common in moſt plantations and pleaſure-grounds in England. The trunk and branches are covered with a rough bark of a browniſh colour, inclined to reddiſh. The leaves are not much above an inch in length, very ſlender, and of a bluiſh green colour; they grow twenty or thirty together, in a round knot, like the bruſh of a pencil. The flowers, as in other trees of this kind, are ſcarce perceived. The cones are oval, ſeldom exceeding the ſize of a pigeon's egg, with broad and ſmooth ſcales.

A decoction hath been made of the freſh buds, to promote urine; but all the virtues of this tree are contained in the utmoſt perfection in the Venice turpentine, which is produced from it; in order to procure which the lower part of the trunk of the tree is cut to the heart in the heat of ſummer, and the reſin flows out. This turpentine operates powerfully by urine, and is reputed to be an excellent balſam; it is a remedy againſt the whites, and to ſtop the diſcharge which remains after the virulence of a recent venereal taint is removed; but in both theſe caſes it muſt be adminiſtered with caution, as too large quantities of it are apt to heat, and to occaſion inflammation.

Larkſpur.

THIS flower is well known in our gardens, to which the double and variegated ſorts are highly ornamental. It ſometimes riſes to the height of two feet, or even a yard; but this only in rich ſoils. The root of the *larkſpur* is ſmall, full of fibres, and periſhes as ſoon as the ſeed is ripened. The leaves are roundiſh, divided into many long and very fine parts, and of a dark green colour. The ſtalks are erect and firm, but much divided, bearing leaves like thoſe already deſcribed, and on the tops long irregular ſpikes of flowers, of different colours, blue, red, white, and ſtreaked; the flowers conſiſt of five leaves, and have a ſpur or heel on the back part of each; theſe are ſucceeded by round ſharp-pointed ſeed-veſſels, filled with black, rough, angular ſeeds.

The leaves of this plant were formerly uſed as a vulnerary medicine, and a decoction of them is ſtill recommended as uſeful in the piles; in which diſorder they are ſaid to ſtop the bleeding without producing heat, which is the common effect of many other aſtringents.

Lavender.

THIS plant is a native of warmer climates, growing wild in the ſouthern parts of France and in Spain; with us it is only cultivated in gardens. It reaches to the height of three feet or more, and lives many years. The trunk or main ſtem, and the branches, are woody, firm, and covered with a greyiſh bark; but the young ſhoots are tender, and green: on theſe ſtand the leaves, which are long, narrow, of a light green colour, round, pointed, and broadeſt at the extremities, and ſtand two at each joint. The ſtalks from which the flowers riſe, are ſquare, green, and have but few leaves, and thoſe ſmaller and narrower than the others. The flowers ſtand in ſpikes or ears; they are ſmall, of a fine blue colour, and very fragrant: the cups which hold the flowers are whitiſh. There is alſo a broad-leaved ſort, but this is much more rare.

Theſe flowers are uſed medicinally: they are cordial and refreſhing, uſeful in the palſy, convulſions, and all diſorders of the head and nerves. They are alſo efficacious in expelling wind from the ſtomach and bowels, and may be taken in tea or infuſion, in which form it is alſo uſed in warming and ſtrengthening fomentations. A cordial ſpirit is alſo made from theſe flowers, with other ingredients, which is given in all hypochondriac diſorders, and in the palſy.

Lavender Cotton.

THIS is a ſhrubby plant, growing wild in the warmer climates but planted in our gardens. It is ſometimes two feet or more in height. The ſtem is light grey; and the ſtalks which grow from it are tough, hard, and of the ſame colour; theſe, which are very numerous, bear oblong, white, and hoary leaves, in figure ſomewhat reſembling thoſe of common heath, but theſe are indented, and of a ſtrong but pleaſing ſmell. The ſtalks which bear the flowers, are long, round, of a greeniſh colour, and without leaves, and each bears at it's top a ſingle naked yellow flower, about the ſize of a ſixpence, or rather leſs. The ſeed is ſmall, longiſh, and channelled, and the root firm and woody. It is a perennial, and laſts many years.

Of this plant the leaves are generally uſed, but ſometimes the flowers; they are both beſt freſh-gathered. An infuſion of the leaves in water, is ſaid to deſtroy worms, and it is a very efficacious though very nauſeous medicine; they alſo promote the female diſcharges, and remove obſtructions of the liver. The leaves and flowers of this plant were formerly recommended as antidotes againſt poiſons, and the bites and ſtings of venomous reptiles. An infuſion of them in wine, is reputed to be a cure for the jaundice.

Spurge Laurel.

THIS little ſhrub ſeldom grows above the height of two or three feet. It has a woody ſtem, about the thickneſs of a man's finger, covered with a bark of aſh-colour; this ſtem towards the top divides itſelf into many branches, which are rather ſlender, and cloathed with long, thick, narrow, and very ſmooth leaves of a gloſſy green, which ſtand round the tops of the branches; among theſe leaves grow the flowers, which are ſmall, oblong, greeniſh tubes, with a few yellowiſh threads in the middle; and theſe are ſucceeded by ſmall, round, black berries. It grows in woods and thickets, produces flowers early in the ſpring, and the berries ripen in autumn. The whole plant is of a hot pungent taſte.

The leaves, and even the berries, are ſometimes preſcribed in dropſies, and are given in a ſlight infuſion; but the operation of this medicine is ſo violent, both as a purge and emetic, that it ought not to be given without the utmoſt caution: few conſtitutions are equal to it's force.

The Leek.

THIS is a garden herb univerſally known for kitchen uſes. It riſes to the height of three feet or more. The root is round and white, with a cluſter of fibres at the bottom. The leaves are large, long, of conſiderable breadth, and of a deep ſhining green colour; theſe leaves encompaſs the lower part of the ſtalk, the upper part of which is naked, and bears at the top a cluſter of ſmall flowers of a purpliſh green. It flowers in June and July. The ſeed is contained in round pods, one ſucceeding each flower, and is flat and black.

Leeks are recommended in aſthmas, coughs, and ſhortneſs of breath, and to cleanſe the ſtomach of tough phlegm. A ſyrup may be made of a ſtrong infuſion of the whole plant, except the fibres; and this is the beſt way of adminiſtering it.

The Lemon Tree.

THIS tree, though a native of warmer climates, is found in the green-houſes in England. The trunk is of moderate ſize, but ſmaller here than in it's native ſoil; it is covered with a browniſh bark, and divides into a great number of irregular branches, armed with prickles. The leaves are large, of a handſome oval figure, and a pleaſing green, the beauty of which remains during the whole winter. The flowers, which are large, and of a gloſſy white, are compoſed of a thick fleſhy leaf, and emit a moſt delicious fragrance. The fruit is of oblong ſhape, and of a yellow colour peculiar to itſelf; it has a ſmall prominence at each end, and contains a fine ſour juice.

The peel of lemons is uſed among other ingredients in all bitter preparations for ſtrengthening the ſtomach, procuring an appetite, and expelling wind. The juice is excellent either freſh or in ſyrup to acidulate diluting drinks in fevers of all kinds; it is alſo diuretic, and uſeful in the ſtone and gravel. It is an admirable remedy for the ſea ſcurvy; and, mixed with ſalt of wormwood, is given with ſucceſs during fermentation, to ſtop violent and dangerous vomitings.

Leadwort.

THIS little plant, though a native of warmer countries, is to be found in the gardens of Great Britain. It grows about two feet high. The ſtalks are weak and ſlender, and are encompaſſed at the lower parts with long narrow leaves of a faint green colour. The flowers, which are ſmall, and of a dull red, or purple colour, ſtand in ſhort thick ſpikes at the tops of the ſtalks, and each flower is ſucceeded by a ſingle rough hairy naked ſeed. The root is large and long, and the whole plant is of an acrid taſte.

This root is uſed for the tooth-ache, which it ſometimes cures almoſt inſtantaneouſly; a ſmall piece of it held in the mouth, draws off a quantity of rheum; and in the ſame way it is ſaid to give ſudden and effectual relief in the head-ache; but it muſt be cautiouſly uſed, for it is extremely hot and biting.

Lentile.

THIS very ſmall pulſe is ſown in ſome parts of England, for the ſake of the ſeeds. It ſometimes riſes to the height of a foot, or even a foot and a half; but the ſtalks are ſo feeble, that it ſeldom ſtands upright. The ſtalk is angular, branched towards the top, and of a light green; the leaves reſemble thoſe of the common pea; conſiſting each of ſeveral pairs of ſmaller ones, on a common rib, and the whole is terminated by a tendril inſtead of an odd leaf. The ſmall leaves are of an oval ſhape. The flowers are ſmall, white, and in figure like thoſe of tares,. They ſtand ſingly, on long foot-ſtalks. The flower is ſucceeded by a pod of a flattiſh ſhape, containing generally two round ſeeds of the ſize of a very ſmall tare, but ſomewhat flattiſh.

This ſeed, which is the medicinal part, being reduced to powder, has made poultices for ſwellings, but it is not in much reputation. The ſeeds themſelves were formerly eaten to ſtop purgings, and cooling cataplaſms have alſo been made of the flowers: but the uſe of both ſeems at preſent to be omitted.

Lettuce.

THIS plant is ſo common in our kitchen gardens, that it ſcarce needs deſcription. It's extreme height, when it flowers, is ſometimes two feet and a half. The ſtalk is round, thick, ſmooth, very upright, of a light green, and ſomewhat encompaſſed by the leaves; which are oblong, broad, but narrower near the ſtalk, and ſomewhat indented at the edges. The flowers grow on the tops of the ſtalks, and are of a faint yellow. The ſeed, which is flat and whitiſh, is winged with a light white down.

Lettuces, which compoſe the beſt part of our ſallads, are grateful to the ſtomach, allay heat, and quench thirſt. The juice of them may be taken to procure ſleep, or the thick ſtalk may be eaten for the ſame purpoſe; and perhaps this is more innocent, as it is certainly leſs offenſive than opium. It is ſaid to be diuretic, and to increaſe the milk of nurſes. The ſeed is one of thoſe which are commonly called the four cold ſeeds.

Wild Lettuce.

THIS is common in our hedges, and takes it's name from the flowers having ſome reſemblance to thoſe of the *garden lettuce*, though it's manner of growth is different. It riſes ſix or ſeven feet high. The ſtalk is large, round, very erect, branched, and of a pale yellow colour, inclining to green. The leaves which grow at the foot of the plant, are very large, being twelve inches long, and four or five broad; they are of a pale green colour: thoſe which grow on the upper part of the ſtalks are ſmaller, but they are both deeply indented at the edges; and if either the leaves, the ſtalk, or any other part of the plant is wounded, a milky juice flows from it, which ſmells like opium, and has alſo a hot bitter taſte. It has many branches, and the flowers are proportionably numerous; they are ſmall, and of a pale yellow colour.

A ſyrup made from a ſtrong infuſion of this plant is recommended as an excellent anodyne; though it is at preſent very little uſed. It is alſo ſaid to relieve violent pains in colics, and other diſorders, and to diſpoſe the ſick perſon to ſleep, producing all the good effects of a gentle opiate, and leaving none of the ill conſequences of that medicine.

The White Lily.

THIS tall, highly fragrant, and elegant garden plant, grows to the height of four or five feet. The ſtalk, which is round, green, large, and very erect, is ſurrounded at the bottom by ſeveral long, narrow, thick leaves, and many more grow upon it all the way up, which are of the ſame ſhape, ſmooth, and of a paler green. The top of the ſtalk is divided, and the flowers ſtand on the diviſions; theſe are large and white, and have ſeveral yellow chives in the middle. The root is bulbous, and compoſed of many thick ſcales.

The roots and flowers are uſed in external applications, the former are excellent, mixed in poultices, to haſten the ſuppuration of abſceſſes; a cataplaſm of the flowers is emollient, and relieves pain: an oil is made of the flowers, by ſteeping them in common oil of olives, but the freſh-gathered flowers are more efficacious, if they are to be had. The root may be procured freſh at all times.

Lily of the Valley.

THIS ſmall but beautiful and odoriferous plant, ſeems to have but little pretence, from it's reſemblance, to any part of the name of that laſt mentioned, except that the leaves are of the lily kind. It ſeldom exceeds ſix or eight inches in height. The leaves are large in proportion to the ſize of the plant, long and broad, of a dark green colour, and full of thick ribs or nerves. From the midſt of the leaves riſes a weak, thin, angular, green ſtalk, bending towards the top, and bearing a drooping row of ſmall white flowers, roundiſh, hollow, and of a delicate and refreſhing ſmell; theſe flowers are ſucceeded by ſmall round berries, which turn red as they ripen.

Of theſe flowers a tea is made, which being drank for a conſiderable length of time, is ſerviceable in all nervous complaints, whether violent and obſtinate head-aches, apoplexies, epilepſies, palſies, convulſions, tremblings, giddineſs, or ſwimmings in the head. And though it may not be alone powerful enough to cure theſe diſorders, in their worſt ſtates; yet if it anſwers the purpoſe of alleviating the ſymptoms, that is too deſirable an object to be neglected, eſpecially where the experiment can be made on ſuch cheap and eaſy terms.

The Water Lily.

THIS is that large and elegant plant, the broad leaves of which are ſeen floating upon the ſurface of the water, in brooks and ponds which communicate with rivers or ſtreams; and in the autumn, large white flowers are commonly obſerved among them. The root of this plant is long and large, and lies buried in the mud. The ſtalks are round, large, and of a ſpungy conſiſtence, with a white pith in the middle; and the leaves, one only of which grows on each ſtalk, are alſo thick, and juicy or ſpungy, they are of a round form, and lie flat upon the ſurface of the water. The flowers blow upon ſingle footſtalks, which riſe, like thoſe of the leaves, immediately from the root; and, like them, are light, round, gloſſy, and pithy. The flowers are large and white, but have yellow threads in the middle; theſe are ſucceeded by a ſeed-veſſel, which is large and round, and contains a number of ſeeds.

The root is uſed medicinally, and the beſt way of adminiſtering it is freſh, in a ſtrong decoction. It is recommended as a valuable remedy for the whites, and for the weakneſſes conſequential to venereal complaints: it alſo reſtrains violent purgings, and thoſe in particular which occaſion bloody ſtools. There are ſeveral other kinds of *water-lily*, which are found in ditches; particularly one with a large yellow flower: and the roots of theſe poſſeſs, in a leſs degree, the ſame virtues as that which we have deſcribed.

The Lime Tree.

THIS tree, which is commonly planted to form avenues in parks and near gentlemen's houſes, is very beautiful when in flower, and extremely fragrant. The trunk is large, ſtraight, and covered with a ſmooth bark, and the branches are tolerably regular. The leaves are ſhort and broad, of a form nearly round, but terminating in a point, and finely indented about the edges. The flowers grow on long yellowiſh ſtalks, which ſhoot out by the leaves, and have ſome yellow, oblong, and narrow leaves upon them: the flowers are alſo of a faint yellowiſh colour, nearly white, and the ſmell of them is extremely agreeable; they are ſucceeded by a ſmall round hoary fruit, about the ſize of a pea. The flowers are uſed medicinally, and are good for giddineſſes of the head, tremblings of the limbs, and almoſt every kind of nervous diſorders. They may be made into a tea; and powerful virtues were formerly attributed to them even in apoplexies, epilepſies, and other violent ſeizures in the head.

Liquorice.

THIS plant is cultivated in many parts of England for the root. It grows a yard or more high. The ſtalk is round, channelled, and branched, and ſet alternately, with rather large and long leaves, each of which is compoſed of many pairs of ſmaller, ſtanding on a common rib, and terminating with an odd one. Theſe ſmaller leaves are of an oval ſhape, and of a duſky green colour, and feel clammy to the touch. The flowers, which are very ſmall and of a blue colour, ſtand in long ſpikes, which riſe from the boſoms of the leaves. The ſeeds are contained in erect pods. The root is uſed medicinally, and it poſſeſſes many virtues. When it is freſh taken up out of the ground, it has a ſweet and rather agreeable taſte. It is a good pectoral, and of great uſe in diſorders of the lungs, coughs, hoarſeneſſes, and ſhortneſs of breath. It alſo operates gently by urine, and is recommended in the ſtone, gravel, ſtoppage and heat of urine, and in ulcerations of the kidnies and urinary paſſages, where it acts as upon the lungs, both in cleanſing and healing.

It is taken to moſt advantage by ſucking or chewing the freſh root; but it may be given in infuſion, or in tea. The black ſubſtance which is ſold in the ſhops, by the names of *liquorice juice* and *Spaniſh liquorice*, is made by evaporating a ſtrong decoction of this root till it is reduced to a conſiſtence: but the freſh root itſelf is much more efficacious.

Noble Liverwort or Hepatica.

THIS flower is not a native of Great-Britain, but is commonly kept in our gardens, where it makes a pretty figure in the ſpring. The leaves which ſpring immediately from the root are ſupported each by a ſingle foot-ſtalk, which is white, thin, and reddiſh; theſe leaves are near an inch broad, and of equal length, and are divided each into three equal parts, pointed at the ends, and of a green colour. The flowers precede the leaves, riſing early in the ſpring, before their appearance; theſe alſo ſtand ſingly on longiſh foot-ſtalks, and are of moderate ſize, conſiſting of ſix blue roundiſh pointed leaves ſet about a greeniſh head, with whitiſh blue chives in the middle. The green head afterwards changes into ſeveral ſmall naked ſeeds. The root is ſmall and fibrous.

An infuſion of the leaves of this plant, is recommended to remove obſtructions of the liver and ſpleen; it operates gently by urine, and is alſo ſaid to be a good medicine in the jaundice, if it is taken in the early ſtages of that diſeaſe.

Green or Ground Liverwort.

THIS is a common low plant, conſiſting wholly of ſmall leaves, which ſpread themſelves on the ground, ſhooting out ſmall fibrous roots on the lower ſide, by which they adhere to the earth or ſtones; theſe leaves are of a fine green colour. It grows on old walls, in wells, and in other moiſt and ſhady places; and is by ſome writers conſidered as one of the kinds of moſs. The leaves are of an oblong ſhape, blunt and thin; they lie one over another, are ſomewhat crumpled, and full of ſmall punctures. They frequently ſpread into cluſters, which cover a ſpace of ground a foot or more in diameter. This is the deſcription of the plant in it's uſual ſtate; but in ſpring, when the ſituation and the weather are favourable, ſlender ſtalks ſpring up among the leaves, on the tops of which are ſmall muſhroom-like heads, which are very tender and brittle. Theſe have been ſometimes called imperfect flowers.

This plant derives it's name from the virtues it is believed to poſſeſs, and which the whole plant is thought to contain. It is beſt green, and freſh-gathered, and may be given in a ſtrong decoction, to remove obſtructions of the liver and other inteſtines; and operating by urine, it is a good remedy in the dropſy and jaundice. It has been given with ſucceſs in hectic fevers, and the firſt ſtages of conſumption, and aſſiſts in reſtraining the whites, and diſcharges after venereal complaints. It is alſo uſed externally to cleanſe the ſkin of foul and ſcabby eruptions, and the bruiſed leaves have the reputation of ſtopping bleedings.

Grey or Aſh-coloured Ground Liverwort.

THIS plant is alſo very common by our dry wood-ſides and other barren places, and in ſome meaſure reſembles the laſt deſcribed, but differs materially in colour. This, as well as the former, conſiſts wholly of leaves of a grey or aſh-colour on the upper ſurface, but more white beneath. The leaves are two inches long, and about two thirds of that breadth: they grow in cluſters together, and are ſometimes more and ſometimes leſs diſtinct; and in the latter caſe appear larger. No ſtalks riſe from this to bear any kind of flowers or ſeeds, as in the ſorts before-mentioned. In this, the tips of the leaves turn up, and are reddiſh; and theſe curled parts contain the ſeeds. The whole plant appears to be dry and ſapleſs.

This plant has been lately uſed, and highly celebrated, as a ſpecific againſt the fatal effects of the bites of mad dogs and other animals. For this purpoſe it is directed to be mixed with pepper, and the patient is at the ſame time to bathe in the ſea; which latter injunction may probably have occaſioned it's ſeeming ſucceſs: for though it has been ſaid to cure dogs, it does not appear that it has ever ſucceeded with a human creature when this terrible diſeaſe has been in it's worſt ſtate. Muſk, opium, and cinnabar, are the preſcriptions now principally in uſe, but we have too much reaſon to apprehend that even theſe are not to be relied on.

Purple Looſeſtrife.

THIS is a handſome wild plant, and is found at the ſides of ditches and rivers. It riſes to the height of three feet, and is very regular in it's growth. The ſtalk is ſquare, hairy, and frequently inclines to a reddiſh colour. The leaves, which ſtand two at each joint, are long and narrow, of a duſky green, and a little rough, and pretty much reſemble thoſe of the willow-tree. The flowers are of a full purple colour, blow in very long ſpikes at the tops of the ſtalks, and are of conſiderable ſize; the ſpikes are frequently ten or twelve inches in length: they are ſucceeded by divided ſeed-veſſels, containing many very ſmall and brown ſeeds. It flowers during moſt of the ſummer months.

The leaves of this plant are ſaid to be a good balſam for freſh wounds, and a cooling and cleanſing ointment may be made of them boiled in lard. A water was formerly diſtilled from it which was recommended for wounded or inflamed eyes, but it is not at this time in any great reputation.

Yellow Looſeſtrife.

THIS plant is alſo found wild about watery places, and is remarkable for it's beauty and elegance. It grows four feet high; the ſtalks are hard, firm, erect, and of very regular growth; they are ſomewhat hairy, and divided into ſeveral branches as they aſcend. The leaves are of a yellowiſh green colour, about the length of a man's finger, and an inch or an inch and a half broad in the middle, growing narrower at each end; theſe are alſo rather hairy, and are ſometimes ſet three or four, but commonly only two at a joint. The flowers, which are large, and of a beautiful yellow, ſtand ſeveral together on the tops of the branches. The ſeed-veſſels are round, and divided into two parts, each full of ſmall ſeeds. The root is long and ſlender, and creeps along the ſurface of the earth.

This root is directed to be dried and given in powder, as an aſtringent, and is ſaid to be ſerviceable in the whites, in bloody fluxes, overflowings of the female periodical diſcharges, and violent purgings; it is alſo equally balſamic. The young leaves may be laid over freſh wounds, which will ſtop the bleeding, and heal them in a very ſhort time.

Lovage.

THIS is a garden plant, not being found wild in this country. The ſtalk is round, tall, hollow, and deeply ribbed or channelled. The leaves are of very conſiderable ſize, and of that particular ſort which are called winged, and are each compoſed of a number of ſmaller; theſe, of this plant are ſet on a divided ſtalk, and are ſhort, broad, indented at the edges, and of a deep green colour. The flowers, which grow in cluſters at the tops of the ſtalks, are ſmall and yellow; theſe are compoſed of five little leaves, and are ſucceeded by oblong channelled ſeed of a brown colour. The root is thick, large, and very much divided, and the fibres from it are numerous, and of a brown colour. It is of a hot, acrid, and aromatic taſte and ſmell.

The freſh roots operate by urine, and are recommended as a good remedy for the jaundice, and the ſeeds and leaves produce the ſame effect; they alſo expel wind. The dried root is a perſpirative, and uſeful in fevers and peſtilential diſeaſes.

Tree Lungwort.

THIS is a moſs of the largeſt kind, and in form ſomewhat reſembles the *green* and *grey liverwort*, but is ſuperior in ſize to either. It is found, but not in great plenty, on the barks of old oaks, and beech trees; in very large woods, it is ſometimes met with in great quantities. Each leaf ſeems to be a ſeparate plant, and is eight or ten inches long, and nearly the ſame breadth; of a yellowiſh green colour above, but more inclining to an aſh-colour beneath: it is of a ſubſtance ſomewhat reſembling leather. The leaf is divided deeply at the edges, rough to appearance and the touch, and full of high ribs or veins on the ſurface. At the flowering ſeaſon, ſome certain ſmall red heads appear, which contain the ſeeds to perpetuate the plant.

This plant is ſaid to be an excellent aſtringent, and is directed to be given in a ſtrong decoction to ſtop the overflowings of the monthly evacuations, and all other hæmorrhages, It is celebrated as a ſpecific againſt a ſpitting of blood, and is commonly given in coughs, conſumptions, and complaints of the breaſt, in ſyrup or infuſion: it is doubtful if it anſwers any good purpoſe in theſe caſes. It has alſo been preſcribed for the yellow jaundice, and ſome adviſe it to be dried and powdered, but it is undoubtedly better freſh.

The Lupine.

AMONG the various kinds of lupines kept in gardens, the beſt for medicinal uſe is that which bears white flowers. This grows to the height of three feet. The ſtalk is round, large, hairy, and of a pale green colour. The leaves, which are placed on long foot-ſtalks, are each compoſed of ſeven, eight, or nine, long and narrow ones, ſpread like the fingers on a hand; and theſe are alſo of a faint green colour, and are narrow near the ſtem, and blunt at the extremities. The flowers, which grow in regular ſpikes at the tops of the branches, are large and white, and reſemble a pea-bloſſom in figure; theſe are ſucceeded by large flat hairy pods ſtanding in an erect poſition. They flower in July, and the ſeeds ripen in the following month.

The ſeeds of *lupines* may be made into a decoction in the manner of barley water; which operating by urine, brings down all female diſcharges, and removes obſtructions. It is reputed to be an excellent medicine in the early ſtages of conſumptions, jaundices, and dropſies; but it does not appear to be powerful enough to root them out in their more advanced ſtate. A decoction, made very ſtrong, is recommended to waſh the heads of children that have ſcurf or breakings out upon them, which they cleanſe and diſpoſe to heal. It may alſo be generally uſed for clearing the ſkin of ſcabby eruptions and other foulneſſes.

Golden Lungwort.

THIS is a tall, ſtraight, and elegant plant, of the hawkweed kind, bearing yellow flowers, and very hairy leaves; it is very common in the mountainous parts of Europe, and it grows wild in ſome parts of England, upon old walls, and in very dry ſituations, but it is not commonly found in this country.

It reaches to the height of two feet; the leaves are large, and of an oblong ſhape, growing to the number of half a dozen or thereabouts immediately from the root, upon round and thick foot-ſtalks: theſe leaves are broad, of a deep green, and ſometimes of a purpliſh colour, and are extremely hairy, the hairs being ſo long, white, and thick ſet, that they give it an appearance of woollineſs. The ſtalk is round, and though rather ſmall, tolerably firm and erect, of a purpliſh colour, and ſomewhat hairy. The leaves which grow on the ſtalk are ſmaller than thoſe from the root, but reſemble them in ſhape, and are in the ſame manner very hairy. The flowers, which are not of any conſiderable ſize, are of a bright and pleaſing yellow colour, and have an effect the more ſtriking as the plant itſelf has ſo much whiteneſs about it. The ſeeds are winged with a white down.

The young leaves, as they ſpring from the root, are uſed medicinally. They poſſeſs nearly the ſame qualities as thoſe of coltsfoot, but their virtues are very much ſuperior to thoſe of that plant.

In ſome parts of the continent of Europe, this plant is more common than in Great Britain, and there it is conſtantly uſed as a pectoral medicine, and is thought highly efficacious in diſeaſes of the lungs, in coughs, aſthmas, and the early ſtages of conſumptions. It may be given in the form of a ſtrong infuſion, or a decoction; and it might probably be productive of very good conſequences, if it was properly tried, in the diſorders we have mentioned.

Though it is not plenty in it's wild ſtate, yet it may be eaſily propagated in gardens, as it produces a conſiderable quantity of ſeed, a ſmall portion of which, once ſown, would afford a ſupply which would not be ſoon exhauſted, as it will flouriſh in the moſt barren places, and even in the crevices of walls, if it happens to fall there, which would probably be the caſe, as it is light and downy, and therefore liable to be ſcattered by the wind.

Madder.

THIS plant does not grow wild in Great Britain, but is cultivated for the ſake of it's root, which is uſed by the dyers, and is about the ſize of a large gooſe-quill, round, but much branched; of a colour inclining to red; and, when waſhed, ſomewhat tranſparent. Each branch of the root has a ſmall, hard, and tough ſtring in the middle; it is of a faint ſweet taſte, and a little bitter. From theſe roots ſpring many ſquare, rough, feeble ſtalks, with joints, at every one of which ſtand ſix or eight leaves, diſpoſed in a ſtar faſhion, and theſe are of a duſky green colour, ſharp-pointed, broad in the middle, and narrow at both extremities, and ſo very rough that they ſeem in a manner prickly. The flowers, which grow in long ſpikes riſing from the boſoms of the leaves, are ſmall and yellow, conſiſting of one leaf divided into four parts, and are ſucceeded each by two ſmall moiſt berries, almoſt black, each of which contains two round ſeeds. It flowers in May.

A decoction of the freſh roots of *madder*, very powerfully aſſiſts in removing obſtructions of the liver and ſpleen, and in the cure of the jaundice and dropſy. It is alſo recommended as a remedy for the ſtrangury, gravel, and ſtone. A poultice of the roots is ſaid to diſſolve extravaſated blood, and to be uſeful in wounds and bruiſes.

Engliſh Maidenhair.

THIS little plant is allied to the true *maidenhair*, which is imported from France, and other warmer climates on the continent of Europe; though it may alſo be found in the weſtern counties of England. It is frequently uſed inſtead of it, though not with propriety; as it does not by any means exceed it in virtues, and is much leſs pleaſant. This plant does not grow above eight inches high, and each leaf, as in all others of the fern kind, is the entire plant. This leaf or plant conſiſts of a great number of ſmall ones, ſet on each ſide a ſhining black rib or ſtalk. Theſe ſmaller leaves are very ſhort, and blunt at the extremities, of a roundiſh though rather oblong form, and of a bright and deep green colour. The ſeeds are lodged as in the others of the ſame tribe, in the form of a brown duſt on the under ſide of the leaves. The root is compoſed of ſmall ſtrings or fibres.

This plant grows commonly in hollow ſhady places, on the ſides of old wells, and on old moiſt ſtone walls; and a ſyrup is made from an infuſion of it, as a ſubſtitute for the true *maidenhair* or *capillaire*, which is commonly ſold in the ſhops.

It is opening and ſoftening, ſerviceable in diſtempers of the lungs and breaſt, coughs, ſhortneſs of breath and hoarſeneſs; and it is certainly uſeful in ſtone, gravel, heat, and difficulty of urine.

White Maidenhair.

THIS is alſo a ſmall plant of the fern kind, and of the nature of that laſt deſcribed. The real *white maidenhair* is not above two or three inches high: though a kind of water fern is impoſed on the public, and ſold in the ſhops under this name, the leaves of which are a foot long. The ſtalks of this are very ſlender, of a whitiſh green colour, and not black as in the other. The leaves are alſo divided into a great number of ſmall parts, and at firſt ſight ſeem to bear ſome reſemblance to the leaves of rue. The ſeeds are alſo found behind or under the leaves; but are contained in ſmall lumps of a brown colour, which cover the greateſt part of the ſurface.

It grows commonly in old walls and buildings, and has a little fibrous root which remains many years. It poſſeſſes the ſame virtues with the other; and is uſed in coughs and other complaints of the breaſt and lungs, but particularly in caſes of obſtinate hoarſeneſs. A decoction of it alſo operates as a ſtrong diuretic, and is therefore ſerviceable in the gravel and retenſion of urine.

Black Maidenhair.

THIS is another ſmall plant of the fern kind, the common ſort of which it reſembles more in ſhape and form than either of thoſe above deſcribed; the principal difference as to appearance being in the ſize. It grows ſix or eight inches high. The ſtalks are ſlender, ſmooth, black, and gloſſy. The leaves, which are very elegantly divided into a great many ſmall parts, are ſhort, of a dark ſhining green, and deeply indented at the edges. They terminate in a ſharp point, and are not obtuſe, like thoſe already mentioned; and theſe leaves grow on little branches, ſometimes in pairs oppoſite to each other, and ſometimes alternately to the number of ten or a dozen pair. The ſeeds lie on the edges of the under part of the leaves, in nearly the ſame form as in the other kinds. The root is rather large and fibrous. It grows in ſhady places, under hedges, and at the roots of trees.

A decoction of this plant operates powerfully by urine, and has the pectoral virtues in common with the reſt.

Golden Maidenhair.

THIS is rather conſidered as one of the largeſt kinds of moſs than a plant. It riſes four or five inches high when it is in it's flouriſhing ſtate. The ſtalk towards the baſe, is covered for an inch or more with ſhort, hard, narrow, ſtiff leaves, ſharp at the points, and of a dull green colour; and theſe ſtand in ſuch cluſters, that they quite conceal the ſtalk, the upper part of which is naked, ſlender, and of a red brown or blackiſh colour. Upon the ſummit of this ſtands a long and roundiſh head or ſeed-veſſel, covered with a woolly ſharp-pointed cap of a yellow colour, which falls off when the head is perfectly ripe. This head is filled with a fine duſt, which is the ſeed. The root is ſmall and ſtringy.

The plant is found in heathy, barren, and boggy places, and the whole of it may be uſed medicinally. It has been reputed to poſſeſs the ſame virtues as the other *maidenhairs*, but it is little uſed internally. The principal application of it at preſent, is to make the hair grow, and for this purpoſe the head is to be waſhed with a ſtrong decoction of it.

The Common Mallow.

THIS wild plant, which grows every where about our hedges, fields, gardens, and among decayed buildings and rubbiſh, riſes to the height of three or four feet. The root is large, whitiſh, has many branches and fibres, and runs deep into the ground. The ſtalk is large, and the leaves are roundiſh, but indented, and divided at the edges into five blunt parts; the lower leaves ſtand on long hairy foot-ſtalks. The flowers are numerous, large, and red, with veins, of purple, or a deeper red colour, interſperſed. The ſeeds, as they lie together, are round and flattiſh. The plant flowers in May and June.

Every part of it may be uſed to ſome advantage, being cooling, opening, and ſoftening, but the root poſſeſſes moſt virtue. The leaves dried or freſh are one of the ingredients in decoctions for clyſters; and this may alſo be drank to aſſiſt the diſcharge of urine, and heal the urinary paſſages when they have been excoriated by the heat of the water. The root is beſt freſh, and ſhould be taken before the ſtalk ſhoots, and when there are only leaves growing from it. This may be boiled in water, and the decoction made very ſtrong, for it is by no means unpleaſant to the taſte. It may be drank in quantities, and is alſo of great ſervice to promote the diſcharge of urine, and to relieve the ſtrangury. It is equally ſerviceable againſt ſharp and acrid humours in the bowels, and for the gravel and ſtone. It makes an agreeable drink in fevers, being acidulated with tamarinds, and is excellent to give children in the ſmall-pox, meaſles, and other eruptive diſorders.

There is another ſmaller kind of *mallow*, which has white flowers. This lies flat upon the ground; and a decoction of it is of a more agreeable taſte than that of the common mallow, though it poſſeſſes the ſame virtues. A tea made of the roots and tops of this herb, will be found of great uſe in promoting the diſcharges by urine, and relieving all complaints which originate in the kidnies or paſſages from theſe organs.

Marſh Mallow.

THIS is a very tall plant of the mallow kind, ſometimes found wild about ſalt marſhes, and the ſides of rivers where the tide flows; but much more frequently cultivated in gardens. It grows to the height of four feet. The root is large, thick, tough, and woody; divided into many branches; yellowiſh without, and whitiſh within, and full of a ſlimy juice. The ſtalks are erect, large, and ſomewhat downy. The leaves are large, broad at the baſe, but narrower at the points, and of a form rather inclining to triangular; they are indented about the edges, and are of a faint green colour, and covered with a ſoft pile like velvet. The flowers reſemble thoſe of the *common mallow* in figure, but are larger, and of a more faint red colour, almoſt white. Theſe are ſucceded by ſeeds, which are alſo of the ſame form as thoſe of the other.

The root and leaves are generally uſed medicinally: the former, which is of an inſipid taſte, may be boiled in water, and the decoction being made ſtrong, is taken with ſucceſs to promote the diſcharge of urine, and bring off gravel and ſmall ſtones. It alſo relieves ſtranguries, and heals the excoriations of the bowels, which are occaſioned by dyſenteries and ſharp purgings. It is good in coughs, and poſſeſſes other virtues in common with the ſmaller mallow, but in a much higher degree. An admirable ſyrup for all the medicinal purpoſes, is made from a ſtrong decoction of this plant.

Vervain Mallow.

THIS plant, which is equally elegant in it's flower, and the manner of it's growth, is common in paſtures, lands, and hedges, in many parts of England. It does not grow two feet high. The ſtalks are round, of moderate ſize, more hairy than the common ſort, and very upright. The lower leaves are ſmall, round, and divided lightly at the edges. Thoſe which grow on the ſtalk are deeply and beautifully cut into five parts in a very regular manner. The flowers are of a very lively red, not ſtreaked, and are twice as large as thoſe of the common mallow. The ſeed-veſſel is larger and nearly black, and the ſeeds are of the ſame form, and diſpoſed in the ſame manner as in the common mallow. The root is white, hard, woody, and ſpreads in the ground. It flowers through moſt of the ſummer months.

If any part of this plant is ever uſed medicinally, it is the root, which is ſuppoſed to have the ſame virtues as that of the common mallow, but in a very inferior degree. A decoction of it is rather more agreeable to the taſte than that of the common mallow.

Mandrake.

OF this plant, there are two kinds: one which has broad leaves, and bears round fruit, and this is called the male; the other, with narrower leaves, and fruit of an oblong ſhape, which is called the female. They poſſeſs the ſame qualities, but in the male they are moſt powerful. Both theſe plants are natives of Italy, where they are found in woods, and on the banks of rivers. In Great Britain they are kept in gardens, where they thrive as well as in their natural ſoils.

Theſe *mandrakes* have no ſtalks. The leaves ſpring immediately from the root, and are very large, being frequently a foot in length, and four or five inches broad in the middle; towards the extremities they grow narrower, and are ſharp-pointed; they are of a dull green colour, and diſagreeable ſmell. From among theſe leaves riſe the flowers, which ſtand upon foot-ſtalks of three,

three or four inches high, ſlender, and hairy, which alſo come immediately from the root; theſe flowers are of a large ſize, of a purpliſh white colour, and of a very unpleaſant ſmell: they are ſucceeded by fruit, of the ſize and ſhape of a ſmall apple; in the male, but more reſembling the figure of a pear in the female kind. This fruit is of a deep yellow colour when ripe, and the ſmell of it is offenſively ſtrong. The root is long, and of conſiderable ſize largeſt at the head, and ſmaller by degrees, as it deſcends; if it happens to meet with a ſtone, a root of ſome tree, or other interruption: it ſometimes divides into two parts, from the middle down wards; but if no ſuch accident obſtructs it's regular growth, it is uſually ſingle. This is the root which is conceived to reſemble the human form, to which in it's ſingle growth it is not in the ſmalleſt degree more like, than any other large root; nay, when by any of the before-mentioned accidents, it is divided, it has no more the appearance attributed to it, than a carrot or parſnip which happens to grow in the ſame way.

A thouſand ſtories are propagated of this root, all of which are equally unfounded. The human figure, head and limbs, are ſometimes cut on the roots of white briony, and ſometimes on thoſe of angelica; after the roots are formed into this ſhape, they are put into the ground again, where they will frequently acquire the appearance of a bark, and favour the pretence of their being natural productions. The tales of theſe roots ſhrieking when they are pulled up, and the uſing dogs to draw them out of the earth, becauſe it is fatal to any human being to do it, and many other reports concerning theſe roots, are equally idle, falſe, and groundleſs, and merely calculated to deceive the ignorant, and extort money from them. There is nothing extraordinary in the root of the mandrake, nor are the terms of male and female properly applied to the two kinds, which would be better diſtinguiſhed, by deſcribing the one as the broader leaved mandrake with round fruit, and the other as the narrower leaved mandrake with oval fruit. The mandrake is not entitled to the diſtinctions of male and female, by any of thoſe marks which procure it for hemp, ſpinach, and many other plants already mentioned.

The freſh root of mandrake has been formerly uſed medicinally; but it operates ſo violently, both by vomit, and ſtool, that few conſtitutions are ſtrong enough to bear it. The bark of the root dried, works as an emetic only, but very roughly. The fruit is ſometimes eaten, but it has a ſleepy quality; though not in any great degree externally, the leaves are uſed in fomentations and poultices, and are ſaid to be uſeful in hot tumours, inflammations, and ſwellings, particularly thoſe of the ſcrophulous kind; the juice of the leaves has been alſo dropped into the eyes to take off heat and redneſs, but as it is in all reſpects both externally and internally, a very powerful medicine, and others may be found in the vegetable world, leſs violent, and more efficacious in the ſeveral diſorders for which it has been tried, we do not recommend the uſe of it.

Sweet Marjoram.

THIS is a common plant, of no great beauty, but kept in gardens for kitchen uſe, and for the ſake of it's virtues. It grows about a foot high; the ſtalks are ſtrong, upright, woody, and ſomewhat hairy. The leaves, which are broad and ſhort, have alſo ſome hairs; they are of a light green colour, not indented at the edges, and of a fragrant and agreeable ſmell. At the ſummits of the branches a kind of ſoft ſcaly heads expand to about the length of three quarters of an inch; and from theſe the flowers riſe, which are ſmall and white, and are ſucceeded by very ſmall ſeeds. The root is fibrous, and, as well as the reſt of the plant, is agreeably ſcented.

The whole plant may be uſed freſh, and it's virtues are extracted by infuſion. It is recommended to relieve the head-ache, giddineſs, and all kinds of nervous complaints, and it has formerly been eſteemed a remedy for apoplexy, palſy, and other violent attacks in the head; but perhaps this may be attributing too much to it. It gently promotes the female periodical diſcharges, and removes all obſtructions of the liver, ſpleen, and other inteſtines. The dried herb may be uſed in powder for the ſame diſorders, but it certainly loſes ſome of it's beſt qualities in this way.

Wild Marjoram.

THIS is a wild plant growing commonly in hedges and thickets, in many parts of England; yet it is ſuperior to that preſerved in gardens, both in beauty and virtues, and deſerves a place with it on both accounts. It riſes to the height of a foot and a half. The ſtalk is ſtrong, very erect, ſomewhat hairy, and of a brown colour inclining to purple; it is perfectly regular in it's growth. The leaves which are broad, ſhort, and round-pointed, and of the ſize of a man's thumb nail, are of a deep green colour, and ſtand in pairs at every joint; they have long foot ſtalks. The flowers blow on the tops of the branches, ſtanding on long ſcaly heads of a beautiful figure and greeniſh purple colour; from different parts of theſe heads ariſe the flowers, which are ſmall but of a pleaſing red or purple colour. The whole plant has a fragrant ſmell and aromatic taſte, at leaſt equal to thoſe of ſweet marjoram.

The freſh tops of this herb taken in infuſion, are ſaid to ſtrengthen the ſtomach, and to be a good remedy againſt habitual colics. They are alſo ſerviceable in violent, and habitual head-aches, and in the long liſt of nervous complaints. They remove obſtructions of the breaſt, liver, and womb, are good in the jaundice, and ſhortneſs of breath, and to promote the monthly diſcharges An oil is ſold in the ſhops under the name of oil of Origanum, but this is frequently made from garden thyme; however, it is very acrid, and a drop of it upon lint, being laid on an aching tooth, frequently gives relief.

Marjoram of Crete.

FROM the name of this beautiful plant, it appears not to be a native of Great Britain; it grows wild in ſeveral of the iſlands of the Archipelago, and is kept in gardens in England; it riſes about a foot high; the ſtalks are ſquare, ſtraight, and covered with a brown bark. The leaves which ſtand on long foot ſtalks, are oblong, broad, and of a whitiſh colour. This plant has ſcaly heads at the tops of the branches, like the other kinds of *marjoram*, and from theſe ſpring the flowers, which are ſmall and white.

The tops are uſed in medicine, and are ſold dry by the druggiſts; but in this ſtate, they generally loſe ſo much of their virtues, that the freſh tops of the Britiſh wild marjoram, or even the dried ones of the laſt ſeaſon, are preferable.

Marigold.

THIS flower is too common in every kitchen-garden to require much deſcription; it riſes a foot high: the ſtalks are large, angular, but not very upright. The leaves are long, rather narrow at the baſe, but broader towards the extremities. The flowers, which are large, and of a fine yellow colour, ſtand at the extremities of the branches. The whole plant is of a light green colour, with a caſt of blue, and feels clammy to the touch. The root is full of fibres

The freſh-gathered flowers of *marigold*, picked from the cups, and made into a tea, are preſcribed in fevers. They are mildly cordial, promote perſpiration, and were formerly given in ſyrup, to throw out eruptions, which were thought neceſſary to appear on the ſkin; but the practice of inoculation has ſhewn us, that it was a very miſtaken practice, to attempt filling the ſurface of the body with puſtules. The juice of the flowers is recommended to cure the jaundice, to aſſiſt ſore or inflamed eyes, and to remove warts.

The Maſtic Tree.

THIS plant is a native of France, Italy, and the iſland of Chios, in the Archipelago, but it is not uncommon in our gardens. It grows to the ſize of an apple tree, and like that is irregular in the diſpoſition of it's branches; which, as well as the trunk, are covered with a grey bark, and are very brittle. The leaves conſiſt each of about four pairs of ſmall ones, without any ſingle leaf at the end; ſet on a kind of rib, or foot-ſtalk, which has a narrow film oneac ſide of it. The leaves, are oblong, narrow, and pointed at the extremities. The flowers, which grow in cluſters, are ſmall and yellowiſh, they are ſucceeded by a bluiſh or blackiſh berry.

The reſin which drops from the wounded branches of this tree, is that gum which is uſed under the name of *gum maſtic*; but this is only produced from thoſe trees which grow in the Archipelago. It is hard, white, and imported in little lumps. It is ſerviceable in all nervous diſorders, and operates alſo balſamically. It is ſaid to be an admirable medicine for a ſpitting of blood, and in the firſt ſtages of conſumptions and hectic diſorders. It alſo reſtrains the whites, and thoſe gleets which remain after venereal complaints. Applied in plaiſters, it is ſaid to relieve the head-ache and tooth-ache, and in many parts of the eaſt this gum is chewed to help the breath and preſerve the teeth.

The wood is aſtringent, and a decoction of it is uſeful in fluxes. Tooth picks are alſo made of this wood, which are ſaid to have the quality of preſerving the teeth.

Herb Maſtic.

THIS little plant is alſo a native of the warmer climates; but is commonly kept in gardens in England. It grows about a foot high, and the ſtem and larger branches are of a ſhrubby or woody nature. The ſmaller ſhoots are whitiſh and brittle. The leaves, which ſtand two at each joint, are ſmall, of an oblong ſhape, and pointed; they are of a light green colour, and have a fragrant, reſinous, and agreeable ſmell, like gum maſtic. The flowers, which are ſmall and white, ſpring from a kind of downy or hairy ſpikes or ears, of a ſingular appearance, by which it may be diſtinguiſhed from all other plants. It remains ſeveral years, but ſuffers much by extreme cold which ſoon cuts it off, unleſs it is planted under a wall, or in a ſouthern expoſure. The root is ſmall and fibrous.

The whole plant may be uſed dry, in infuſion or powder, as a ſtrengthener of the ſtomach and aſtringent. It reſtrains the overflowings of the monthly diſcharges, for which purpoſe the powder of the tops may be given in red wine: a ſcruple is a doſe, or leſs, according to circumſtances.

Syrian Maſtic Thyme, or Marum.

THIS elegant little plant is alſo a native of a warmer climate, but is to be found in all the gardens and green-houſes of Great Britain. It riſes a foot high. The ſtalks are ſmall, woody, and whitiſh: the leaves, ſtand in pairs at the joints, are ſmall, and in ſhape like thoſe of *thyme*, but of a pale green colour on the upper ſide, and white and hoary beneath. The flowers are ſmall and reddiſh, growing at the tops of the branches, in a kind of little ſpikes or cluſters, of an oblong form; they ſtand in large hoary white cups. The whole plant has a very acute but moſt agreeable ſmell, and a taſte highly aromatic. Cats are ſo fond of this plant, that they rub it to pieces whenever they get at it. It is recommended for all diſorders of the head and nerves, and is ſeldom taken internally, but is a principal and highly uſeful ingredient in cephalic ſnuffs.

Maſterwort.

THIS is a native of mountainous countries on the continent of Europe, and kept in our gardens, not for it's beauty, but it's virtues. It riſes to the height of two feet. The ſtalks are round, channelled, hollowed, and ſtraight, though not very ſtrong. The leaves are each compoſed of three ſmaller; they are of a deep-green colour, ſomewhat reſemble thoſe of angelica, are blunt at the points, and indented about the edges. The flowers, which are ſmall, white, and compoſed each of five leaves, ſtand in little cluſters at the tops of the branches, and are each ſucceeded by two round and flat white ſeeds. The roots are long, of a brown colour without, and divided; they are of a ſtrong ſmell and an acrid aromatic taſte.

The root is uſed medicinally, and is ſaid to be cordial and perſpirative; it is ſerviceable in fevers, and in diſorders of the head, ſtomach and bowels. It is alſo recommended in all contagious and peſtilential fevers, and as an antidote againſt internal poiſons, and injuries occaſioned by bites or ſtings of noxious or venomous creatures. Taken up freſh, and given in a light infuſion, it promotes ſweat; and, perhaps, if it was more uſed, would be found to be a better medicine for that purpoſe than many of the foreign roots and drugs which are kept in apothecaries ſhops.

Maudlin.

THIS plant is a native of Italy, and other warmer countries, but is common in our gardens, where it is kept more on account of it's virtues than it's beauty. It grows about a foot high, riſing from a woody and branched root, which endures many years. The ſtalk is round, erect, ſtrong, not branched, and of a light green. The leaves are numerous, longiſh, narrow, and finely indented about the edges. The flowers, which are ſmall and naked, of a golden yellow colour, and conſiſt only of a kind of thrums in ſcaly cups, which contain the ſeed, ſtand in large cluſters at the tops of the ſtalks. The whole plant has a ſtrong and rather pleaſant ſmell, and a bitter taſte. It flowers in the latter ſummer months.

The whole may be uſed either freſh or dried, but is to be preferred in the former condition. An infuſion of it, perſevered in for a proper length of time, is recommended in diſorders of the ſtomach and liver, to cure the jaundice, deſtroy worms, and remove obſtructions of the periodical diſcharges of women.

Stinking Mayweed.

THIS common wild plant grows in corn fields and waſte places, and greatly reſembles camomile, only that the leaves are more finely divided, of a dark-green, and the plant grows more erect. The ſtalk is round and channelled: the herb riſes a foot high. The flowers, which are alſo like thoſe of camomile, ſtand ten or a dozen near each other at the extremities of the branches, but they grow ſeparately, and do not compoſe a cluſter. The whole plant has a ſtrong and very diſagreeable ſmell. It flowers in May.

An infuſion of the freſh plant is preſcribed in hyſteric and hypochondriac complaints; it is alſo ſaid to promote the female diſcharges. Boiled to a poultice, it is reputed to give eaſe in the piles.

Meadow Sweet.

THIS plant is frequently found wild about the ſides of rivers. It grows three or four feet high, from a long reddiſh fibrous root. The ſtalk is round, channelled, erect, ſtrong, and of a light green colour, ſometimes inclining to purple; each leaf is compoſed of two or three pair of ſmaller, which are ſet on a thick rib, and have an odd leaf at the end. They are of a full green on the upper ſurface, and hoary beneath, full of veins, indented at the edges, and rough to the touch. The flowers, which are ſmall, and compoſed each of five leaves, ſtand ſo cloſe that the whole cluſter repreſents a ſingle large flower. Theſe flowers are ſucceeded by little round heads, in which the ſeeds are ſet in a twiſted manner like a ſcrew. It flowers in June.

An infuſion of the freſh leaves and tops of *meadow ſweet*, acts as a perſpirative, and is recommended in fevers and other malignant diſtempers: it is alſo ſaid to be ſomewhat aſtringent, and is therefore preſcribed in fevers attended with purgings. A half pint of the infuſion may be taken every four hours, or oftener, as occaſion may require.

The Medlar Tree.

THIS tree is common in gardens, orchards and plantations. It grows to the ſize of an apple-tree, and in the ſame irregular manner, but the branches have thorns on them. The leaves are longer and more narrow than thoſe of the apple tree, and are ſharp-pointed. The flowers conſiſt of five leaves each, are of the ſize of apple bloſſoms, and white. The fruit is round, open at the bottom, and incloſes five hard ſtones. It is of an auſtere taſte, and not eatable till it has acquired mellowneſs by keeping, and is even in a ſtate of rottenneſs. It blooms in May, but the fruit does not ripen till November.

Medlars are cooling and aſtringent; a ſtrong decoction of the unripe fruit is given to ſtop violent fluxes. The ſeeds, which operate as diuretics, are ſaid to be a remedy for the gravel and ſtone, and may be adminiſtered in powder or decoction, but as they do not act very powerfully they are ſeldom uſed.

Melilot.

THE common *wild melilot* has a large branched ſpreading root, from whence riſe ſeveral weak, ſlender, green, channelled ſtalks, with three oblong round, pointed leaves at every joint; theſe leaves are indented about the edges, and are generally eaten to pieces by inſects. It grows a foot and a half or more high. The flowers are ſmall, and reſemble in ſhape the flowers of tares or peaſe, but much ſmaller: each of theſe is followed by a round pod, rough and green. The whole plant, and particularly the flower, is of a peculiar but not diſagreeable ſmell. It grows very commonly among corn and in hedges, and flowers in June.

The freſh leaves and flowers of this plant are excellent mixed in poultices, to mollify and diſperſe ſwellings, and in baths and fomentations to relieve inflammations, and pains attending hard tumours. They were formerly uſed in a plaiſter for dreſſing bliſters, but as it was not often procured genuine, and this ointment was frequently coloured with other herbs, it is not at preſent in much reputation.

The Melon.

THIS is a trailing herb, or vine, and grows to the length of eight, or ten feet. It is not erect, but creeps on the ground. The ſtalks are angular, large, and of a light green colour. The leaves are large and broad, rather round, but not ſo deeply divided as in moſt others of the creeping plants of this kind; the ſtalks are furniſhed with tendrils, to lay hold of any thing that preſents itſelf. The flowers, which are very large and wide at the mouths, reſemble thoſe of the cucumber, and are of the ſame yellow colour. The fruit is well known at our tables, and is of various ſhapes, and ſizes, ſome oblong, ſome nearly round, and others flattiſh at the ends; the different ſorts, have alſo different ſurfaces, ſome ſmooth, and others rough. Melons contain many ſeeds, and a juicy pulp of ſweet, rich, and agreeable flavour.

The ſeeds are uſed medicinally; they are cooling and ſerviceable in fevers, and other inflammatory diſorders: they may be given in emulſions, beat up with barley-water, in which way they make a good drink, which is alſo directed, and gives relief, in the gravel, ſtone, and ſtrangury.

The Mezereon Shrub.

THIS beautiful ſhrub is a native of many parts of the continent of Europe, and particularly about the mountains of Swiſſerland, and Germany; it is preſerved in our gardens and plantations, where it riſes four feet high, and is very full of irregular branches, which are very tough and ſtrong. The leaves, which are of an oblong ſhape, and narrow, grow in cluſters from little protuberances on the bark. The flowers, which ſhoot alſo in cluſters round the upper parts of the branches, before the leaves appear, are ſmall, red, peach-coloured, and hollow; theſe are ſucceeded by oblong berries, which turn black as they ripen. The root is woody, and creeping, and the plant flouriſhes well in this climate, where it is eaſily multiplied. It flowers in the very early ſpring. The root, bark, leaves, and berries, have been uſed medicinally, but they all act as very violent purges, and muſt therefore be given with great caution, and in ſmall doſes, to ſuch only as have ſtrong conſtitutions; taken in any conſiderable quantities, or by perſons of tender conſtitutions, they will occaſion vomiting, and bloody ſtools, but to hardy people, only operate as a briſk purge; and to ſuch conſtitutions, may be ſerviceable in dropſies, aſthmas, and other obſtinate diſorders. They may be given in a light infuſion, but we do not recommend it, as the adminiſtering it by ignorant perſons, may be productive of ſome danger.

Millet.

THIS plant is of the graſs kind, and grows large and upright, nor is it wholly deficient in elegance; it riſes four feet high. The ſtalk is round, large, hollow, and jointed; the leaves, which are long, of proportionable breadth, of a pale green colour, and hairy, encompaſs the lower part of the ſtalk. The flowers and ſeeds grow at the extremities of the ſtalks, in cluſters of ſuch ſize and weight, that the head uſually bends down. The flowers are trifling, much reſembling thoſe of other graſſes; the ſeeds are a ſmall, hard, and whitiſh grain.

The ſeeds are uſed as food in ſome parts of the world; here they are employed ſometimes inſtead of barley, to make a drink, which is recommended in fevers, and againſt heat of urine. *Millet* is ſomewhat aſtringent, windy, and hard of digeſtion.

Milkwort.

THIS little plant is commonly found upon heaths, and in dry paſtures, in many parts of England; it has many leaves, and blue or white flowers (a variety which ſeems to be occaſioned by accidents) which grow in looſe ſpikes. The ſtalks, which are alſo very numerous, and much branched, are ſlender, and ſo feeble, that they ſpread themſelves upon the ground in the form of a little green tuft; but there is ſo great a variety in the appearance of this plant, beſides the difference in the colour of the flowers, that it has been divided into two or three kinds, by ſome botanical writers, yet all theſe will riſe from the ſame ſeed, ſo that the difference can only be attributed to the ſoil; and expoſure; the plant being unqueſtionably the ſame in every eſſential reſpect, and poſſeſſing the ſame virtues, in which ever appearance it is taken. When it grows in dry and barren places, the ſtalks do not exceed three or four inches in length the leaves are very thick ſet, ſhort, and of an oval form. The flowers are, in this caſe, alſo of ſmall ſize, generally blue, but as before obſerved, ſometimes whitiſh, ſtreaked with blue, and at other times perfectly white; when the ſoil is richer, and the ſituation more favourable, the leaves take an oblong figure, and are narrow, pointed at the ends, and of a lively green colour. The ſtalks are alſo an inch or two longer, in this caſe; the flowers are uſually blue; and this is the ſtate in which the plant is moſt commonly found. When it grows in ſtill more advantageous ſituations, as upon the damp ſide of a hill, among ſprings, and in the midſt of tall graſs, then it's leaves are yet longer, and the ſtalks more ſtout and upright, and the flowers red. From theſe deſcriptions of the ſeveral appearances of this little plant, it will eaſily be diſcovered in every ſtate, and it is indifferent in which of them it is taken. The root is frequently of a conſiderable ſize, and ſingle, but it is more commonly divided into ſmaller parts. It is of a whitiſh colour without, and of a diſagreeable, acrid, and pungent taſte.

This plant was unnoticed, as to any medicinal virtues, till the ſeneka root became celebrated in America, againſt the effects of the bite of the rattle-ſnake, and was tried and found here to be ſerviceable in pleuriſies; it was then diſcovered that this was the root of a ſpecies of *milkwort*, not very different from that of the growth of Great Britain, and in conſequence experiments were made with the roots of this plant, which were found to be effectual in the ſame caſes, as to the poiſonous bites of the venomous reptiles of this country; but theſe are ſo little to be dreaded here, that this part of the good qualities of this plant are of no great importance; it has, however, been found uſeful in pleuriſies, and in all other diſeaſes, where the blood is thick and ſizy. For this purpoſe the root is to be taken, and it poſſeſſes it's full virtue in the ſpring, when the ſtalks are juſt ſhooting out of the ground, at which time it ſhould be taken up and dried, for the ſervice of the year. When freſh, it may be given in infuſion; but in it's dry ſtate it muſt be powdered, and taken in ſubſtance.

Spear Mint, or Garden Mint.

THIS plant is too univerſally known in every garden and kitchen in the kingdom, to need very minute deſcription. It riſes to the height of two feet, the ſtalks are ſquare, ſingle, erect, and ſtrong, and of a light green colour. The leaves, which ſtand two at a joint, are long, narrow, and of a much darker green than the ſtalks, indented at the edges, and ſharp-pointed. The flowers, which are ſmall and purple, and blow in July, ſtand beautifully diſpoſed in long ſpikes, on the tops of the ſtalks.

The whole plant has a ſtrong but a fragrant ſmell, and an agreeable aromatic taſte. The root creeps and ſpreads in the earth, and is not eaſily extirpated.

The whole plant may be uſed freſh or dried, and is an admirable remedy for diſorders of the ſtomach. It reſtrains vomiting and hiccough, promotes an appetite, and removes pains. It may either be given in the ſimple diſtilled water carefully made, or in an infuſion. To ſtop vomiting, the freſh herb is ſometimes directed to be bruiſed and applied externally to the pit of the ſtomach.

Water Mint.

THIS common wild plant of the mint kind, grows about almoſt all watery places, and does not differ very greatly from the herb laſt deſcribed. It is a foot or a foot and a half high. The ſtalks are alſo ſquare, erect and ſtrong, and generally of a duſky colour. The leaves, which are broad and ſhort, ſtand in pairs at the joints, and are of ſo deep a green colour, as to appear browniſh; they are ſomewhat hairy, and indented about the edges. The flowers, which are of ſuperior ſize to thoſe of common mint, are of a paler red or purple colour, and grow in round cloſe cluſters at the tops of the ſtalks, and about the upper joints. The whole plant emits a ſtrong ſmell, not diſagreeable, but ſeeming to partake both of that of *garden mint*, and *penny-royal*. The taſte is ſtrong and pungent, and rather more diſagreeable than the other.

The diſtilled water of this plant is of great ſervice in colics, pains in the ſtomach and bowels, and will effectually remove obſtructions; in the former caſes it is ſo efficacious, that a ſingle doſe of it often cures the colic. This herb has been excluded from common uſe by the introduction of pepper mint, but every ſpecies of the mint may be uſed. Where a ſimple weakneſs of the ſtomach is the only complaint, the common mint may be given alone: the pepper mint is an admirable remedy for colic pains; and for ſuppreſſions of the female periodical diſcharges, the common wild *water mint*. All the kinds may be given in tea or infuſion; but a ſimple water diſtilled from them, and made of proper ſtrength, is very much to be preferred.

Pepper Mint.

THIS ſpecies of mint reſembles more the *wild mint* laſt deſcribed, than the *ſpear* or *garden mint*, both in form and qualities. It is larger than either, growing two feet and a half high. The ſtalk is ſquare, ſtrong, and erect, and of a light green colour. The leaves, which ſtand in pairs at the joints, are broader than thoſe of common mint, not very long, of a full green, and indented deeply at the edges. The flowers grow in looſe oblong ſpikes, on the tops of the branches; they are alſo larger than thoſe of ſpear mint, and of a pale red. The whole plant has an agreeable acute ſmell, and a biting taſte like pepper. The root is ſlender and creeping. Though *pepper mint* is cultivated with care in every garden, it is found wild in many parts of Eſſex and Hertfordſhire.

The whole plant is uſed medicinally, both freſh and dried, but the diſtilled water is the beſt preparation of it. It is an excellent remedy for the windy colic, which it ſometimes removes inſtantly. It is alſo recommended as a remedy for the gravel and ſtone.

Long-leaved Wild Mint.

THIS is another kind of *wild mint* found in many parts of England. It riſes to the height of two feet, and is of very regular growth. The ſtalk is ſquare, ſtrong, erect, of a light green colour, and ſomewhat hoary, and many young ſhoots ſpring from the top of it. The leaves are long and narrow, hoary, eſpecially underneath, deeply indented about the edges, and pointed at the extremities. The flowers grow in ſpikes at the tops of the young ſhoots; they are of a pale purple colour, larger than thoſe of common mint, and very numerous. The whole plant has a ſtrong but rather agreeable ſmell.

The leaves and ſtalks are uſed medicinally, either freſh or dried, and may be given in an infuſion: the diſtilled water is nauſeous. It is reputed to ſtrengthen the ſtomach, remove colic pains, and promote the female periodical diſcharges; for which purpoſe it is eſteemed a very valuable medicine, but the uſe of it muſt be perſevered in for a conſiderable time.

The Myrtle.

THIS beautiful ſhrub is a native of Italy, Spain, and ſeveral iſlands in the Mediterranean, and is common in our gardens, and particularly in the two weſtern counties, where it reaches a very conſiderable height, and ſtands the winter without ſhelter. The trunk is covered with a brown and not quite ſmooth bark. The branches are very numerous, ſmall, but tough, and of a reddiſh colour. The leaves are elegant; they are of different ſizes in the various ſorts, but they are in all of a fine green colour, pointed at the extremities, and not indented at the edges; they ſtand in great numbers and in a regular and beautiful order upon the branches. The flowers, which are large, white, and full of threads, are ſet on ſhort foot-ſtalks, and in ſome of the varieties are double: they are ſucceeded by a round black berry, of the ſize of the largeſt pea, with a crown at the extremity oppoſite the ſtalk. The leaves, when bruiſed, emit a moſt agreeable fragrant ſmell.

The leaves and berries of the *myrtle*, but chiefly the latter, are uſed as medicines; they are cordial and aſtringent. A ſtrong infuſion of either is given with ſucceſs to ſtop a ſlight purging, and it is equally uſeful in ſtrengthening the ſtomach, and removing the complaint. The dried leaves, powdered, are excellent againſt the whites, and in fallings down of the womb, or the gut at the fundament, and may be uſed both internally and externally. The berries are eſteemed a remedy for bloody fluxes, overflowings of the periodical diſcharges, ſpitting of blood, and other hæmorrhages. The infuſion hath alſo been recommended for defluxions on the breaſt, occaſioned by old catarrhs.

Miſletoe.

THIS extraordinary plant is a native of Great Britain, not growing on the earth like other herbs, but on the branches of trees, where it makes a very conſpicuous figure. It grows to the height or length of two feet, and is divided into many woody branches, covered with a yellow bark: theſe branches are of different ſizes, ſeldom exceeding the bigneſs of a finger, but generally much ſmaller; it's whole figure is quite unlike the tree on which it grows, in fruit, leaves, and bark. The branches divide and ſubdivide regularly by two, and are eaſily broken at the joints or diviſions, where the leaves, which are alſo yellowiſh, ſtand in pairs. They are fleſhy, of an oblong figure, narrow at the baſes, and broader toward the extremities. The flowers, which are yellow, and compoſed of four leaves each, are ſmall and of indifferent appearance; they are ſucceeded by a white tranſparent round berry, of the ſize of a pea: this, when ripe, is full of a tough clammy juice, and contains one flat heart-ſhaped ſeed. It grows upon the oak, the maple, the aſh, the lime, the crab, the apple, and ſeveral other trees; but that which is on the oak is eſteemed moſt valuable; though perhaps, merely on account of the ſacred reſpect in which it was held by the old druids.

The leaves of the *miſletoe*, dried and powdered, are celebrated for curing the epilepſy, or falling ſickneſs. They are alſo recommended, in all nervous diſorders, and the conſequence of thoſe complaints, whether palſy, apoplexy, giddineſs or convulſions; but if they are expected to afford relief, a proper time muſt be allowed for their operation, and for adminiſtering a ſufficient quantity.

Moonwort.

THIS is a pretty little low plant, found wild in ſome parts of the kingdom, and in particular in the warren at Woolwich, but it is rather ſcarce. It does not exceed ſix inches in height, and conſiſts of the ſtalk, one ſingle leaf, and the flowers. The ſtalk is round, large in proportion, and ſtrong; it is naked to the middle, where the leaf ſprings, and appears to be compoſed of ſeveral pairs of ſmall ones, but is really a whole and ſingle leaf, ſo deeply divided as to reſemble a number of ſmaller, each of thoſe diviſions is round and hollowed, from which circumſtance it has taken the name of *moonwort*. Above the foot of the leaf, the ſtalk continues naked for an inch or two, and then riſe cluſters of globular heads, containing the ſeeds, which are very ſmall, duſty, and of a brown colour. The leaves of moonwort dried and powdered, are adminiſtered internally, to ſtop purgings and the overflowings of the monthly diſcharges. The freſh plant bruiſed and laid to a cut, is ſaid to ſto p the bleeding, and heal it; and an ointment has been made of it, which has been ſuppoſed to check a bloody flux, by applying it externally to the reins.

Hairy Tree-Moſs.

THIS is a plant of the moſs kind, which is ſometimes found in large foreſts, in England, but ſeldom elſewhere; it adheres to the branches of old oaks, and depends from them in long ſtrings. The tufts of it are frequently a foot long, and taken together, two or three inches thick, they conſiſt of a great quantity of ſtalks and branches, the largeſt is not of greater ſize than a large packthread; they are of a greyiſh colour, and are made up of a ſoft bark, and a firm white fibre within it; the bark is frequently cracked, and the branches ſeem to be jointed, the ſmaller fibres, or branches of this plant, reſemble hairs. On the largeſt grow, at certain ſeaſons, little hollow brown lumps, which contain the ſeeds, but they are ſo exceedingly ſmall that they are not obſerveable, without cloſe inſpection. The whole plant appears to be dry and without ſap in it's moſt vigorous ſtate, nor has it the ſmalleſt appearance of leaves upon it.

This moſs, powdered, is eſteemed an excellent aſtringent; it muſt be dried in an oven, beaten in a mortar, and ſifted. The white fibres are not reducible to a powder, but will remain when the ſoft parts paſſes through the ſieve, and are of no uſe, all the virtue being contained in that part which powders. It is recommended to ſtop the whites, reſtrain overflowings of the periodical evacuations, and bloody fluxes, and to ſtop ſpitting of blood. It does not appear to be in much reputation, though it is ſpoken highly of, by thoſe who have tried it; the doſe is half a dram, or leſs, according to age and other circumſtances.

Cup Moſs.

THIS *moſs*, or plant, grows commonly on ditch banks, by the ſides of woods, and in other dry, barren, and hilly places. It is compoſed of a thin coat, of a leafy matter, which ſpreads upon the ſurface of the ground; among which ariſe a kind of ſmall cups. The leafy part is as dry and devoid of juice, as a perfect withered leaf in autumn, it is divided into ſeveral irregular parts, by deep notches; and is greyiſh or green on the upper ſurface, and hoary beneath. The cups, which riſe about half an inch high, have each a ſtrong ſtem and an open mouth, and contain no appearance of ſeed; theſe are alſo of the ſame grey and green colour, the mixture of the latter being in ſome inſtances more than in others. The ſurfaces of theſe cups have a duſty appearance, and one of theſe ſometimes grows from the edge of another, and again for three or four ſtories. Among accidental varieties, this moſs ſometimes bears ſmall brown lumps, and theſe are ſuppoſed by ſome to contain the ſeeds, though others are of opinion that neither flowers or ſeed are diſcoverable.

The whole plant may be uſed medicinally; to which end it muſt be taken freſh from the ground, ſhook clean, and a ſtrong decoction made of it, to which muſt be added an equal quantity of milk; and this liquor being ſweetened with honey, is ſaid to be a good medicine for children's coughs, and of peculiar efficacy in that which is called the chin-cough or whooping-cough.

Common Ground Moſs.

THIS is a ſtill ſmaller plant than that laſt mentioned, which ſometimes creeps on the ground, and ſometimes riſes in tufts, two or three inches high, according to the ſituation in which it is found, which is in woods, hedges, at the roots of trees, and upon moſt barren grounds.

The ſtalks are extremely ſlender, but thickly covered with leaves, and the branches are ſo diſpoſed, that they in ſome meaſure reſemble fern, though infinitely ſmaller. The leaves, which are of a ſize ſo ſmall as to be proportioned to the plant, are of a triangular ſhape, and a lively green colour; and ſtand off from the lower part of the ſtalks, but incloſe and cover them on the upper. It is very ſeldom that it bears ſeeds; but, when this happens, naked and very ſlender foot-ſtalks, about an inch long, riſe from the boſoms of the leaves, and ſupport, on the top of each, a ſmall oblong head of a brown or reddiſh colour, which is covered with a cap tapering to a point, containing fine green duſt; and this is the ſeed, but no diſtinction of it is perceivable.

The whole plant being dried and powdered, is adminiſtered with ſucceſs, to reſtrain overflowings of the monthly evacuations, bleedings at the noſe, and other hæmorrhages; and it is alſo ſaid to be a remedy for the whites. A notion formerly prevailed, that it would ſtop bleedings at the noſe, by being only held in the hand, but theſe charm-like remedies, are now generally exploded.

Mother of Thyme.

THIS little plant is commonly found wild upon heaths, commons, and wayſides; and grows in little tufts, on dry hillocks. The ſtalks, which are round, ſlender, of a reddiſh colour, and from five to eight inches long, are very ſeldom erect. The leaves are ſmall, and of an oval figure, and grow in pairs at the joints; they are ſmooth, and of a lively green. The flowers, which are of a reddiſh purple colour, ſtand in ſmall looſe ſpikes at the tops of the ſtalks. The whole plant emits a very fragrant ſmell; the taſte of it is aromatic and agreeable. There are two or three varieties of this plant: one with much larger flowers; another with larger leaves; and a third, the leaves and branches of which are hairy; but they all poſſeſs the ſame virtues. It is ſaid to be cephalic, ſtomachic, and diuretic, and to be an excellent medicine in palſies, epilepſies, and all other nervous caſes; and it is recommended as a cure for green-ſickneſs, and a great promoter of female evacuations. It may be uſed freſh or dry: an infuſion of it is very agreeable to the palate, and perſevered in will remove moſt of the common nervous diſorders; and, in particular, the night-mare, a troubleſome, obſtinate, and diſagreeable complaint, has been known to yield to this medicine. It is alſo ſaid to be uſeful in old coughs and defluxions on the lungs, and to ſtop ſpitting of blood. An oil is diſtilled from it which gives eaſe in the tooth-ache.

Motherwort.

THIS tall plant is commonly found growing wild about farm-yards, and in dry and waſte places, but particularly under walls. It riſes a yard high. The ſtalk is ſquare, large, erect, and ſtrong. The leaves ſtand on long foot-ſtalks, in pairs, at the joints, each divided into three parts, that in the middle projecting beyond the others; they are deeply indented at the edges, of a deep green colour, and a very offenſive ſmell. The flowers, which are of a red or purpliſh colour, grow in a kind of prickly cups at the ſame joints with the leaves, and ſurround the ſtalks, and theſe are ſucceeded each by four ſeeds in a cup. The root is ſmall, ſlender, creeping, and whitiſh. It flowers in June.

When this plant is dried, every part of it may be uſed, but in it's freſh ſtate the tops are beſt. It may be given in a ſtrong infuſion or decoction, and is eſteemed ſerviceable in hyſteric complaints, and to promote the female diſcharges. It is alſo celebrated for diſorders of the heart, and curing the palpitation of it when that complaint is hyſteric. A decoction of this herb is alſo ſerviceable to thoſe who are ſubject to ſwoonings. The powder of it, after it has been dried, is recommended to haſten childbirth, for which purpoſe a dram of it is directed to be given in a glaſs of wine.

Mouſe Ear.

THIS little plant grows upon heaths and commons, and has a ſmall root full of ſtrings, ſending forth ſtalks which trail on the ground, and ſhoot out fibres at every joint, by which it takes freſh root. The leaves, which grow alternately, or in cluſters on the ſtalks, are about an inch long, and half that breadth, ſharp-pointed, of a deep green on the upper ſurface, but white beneath, thickly covered with long ſtiff brown hair; and ſo much of the under part is uſually ſeen, that the whole plant looks hoary. The flower-ſtalks riſe ſingly, and are without leaves, and hairy, each of which bears only one flower, which ſtands on the top, is ſomewhat of the ſhape of dandelion flower, but ſmaller, and of a beautiful pale yellow colour above, but ſtreaked with purple underneath. The flowers turn to a white down, within which lie ſmall white ſeeds; and the ſtalks, when broken, yield a ſmall quantity of a milky juice. The plant has little or no ſmell, but a bitteriſh ſtyptic taſte.

This herb is eſteemed a good aſtringent; a decoction of it, freſh gathered, is recommended againſt the bleeding of the piles, and the leaves, boiled in milk, may be applied as a poultice externally. It is uſed as a gargle in ulcerations of the mouth, and is good to reſtrain the overflowings of the periodical diſcharges, all other hæmorrhages and the whites. The juice of the leaves has been preſcribed as a remedy for the ſhingles.

Mugwort.

THIS tall plant, which grows commonly in hedges, ditches, and on waſte grounds, riſes commonly a yard high. The ſtalk is round, channelled, ſtrong, erect, and branched; often of a purpliſh colour, and full of pith. The leaves, which ſtand upon it without regularity, are large, and each conſiſts of a number of ſmall parts deeply indented and pointed. They are of a dull green on the upper ſurface, and white underneath. The flowers, which are ſmall and of a yellowiſh colour, with a caſt of purple, ſtand in ſmall cluſters about the upper parts of the branches, but they are upright, and do not hang down like thoſe of wormwood. The root is tough and ſmall, running obliquely in the earth, and is full of fibres. It flowers in June.

The leaves of *mugwort* may be uſed freſh or dried, and are beſt given in infuſion or tea, and they are reputed to promote the periodical diſcharges, and to remove the common hyſteric complaints. Externally, they are applied in baths to ſtrengthen the head and nerves.

The Mulberry Tree.

THIS tree grows to a very large ſize, and is common in every garden. The branches are very numerous and ſpreading, and, as well as the trunk, are covered with a brown rough bark. The leaves are large, broad at the baſes, and narrower or pointed at the extremities, and finely indented about the edges. The flowers are cloſe to the branches, conſiſt of four leaves, and grow in bunches; theſe are followed by large oblong juicy fruit, compoſed of a great number of ſmall grains ſet together in a round or oblong form. It is uſually black when ripe, but the juice is of a beautiful purple; there is alſo a kind with white fruit, but this is not common in Great Britain.

The bark of the root, and the fruit, are both uſed medicinally; the former is to be uſed freſh taken off, and being boiled in water to a ſtrong decoction, is ſaid to be of great ſervice in the jaundice, and to remove obſtructions of the liver and other inteſtines. It operates by urine. The unripe fruit is a good aſtringent, and efficacious in ſtopping fluxes and taking off inflammations from the mouth and throat; and a ſyrup made from the juice of the ripe fruit, with a proper quantity of ſugar, is cooling, aſſiſts in quenching thirſt in fevers, and, mixed with water, makes an excellent gargle for ſore mouths.

White Mullein.

THIS lofty plant, which reaches to the height of five or ſix feet, grows wild in hedge ſides, highways, and other dry places. The leaves, which riſe immediately from the root, are about twelve inches in length, and the breadth of a man's hand; ſharp-pointed at the extremities, indented about the edges, and covered with a hoary or downy woolineſs. The ſtalk is large, ſtrong, and very upright, of a hoary appearance, and covered with ſmaller leaves of the ſame figure as thoſe from the root, only that the foot-ſtalks ſeems to run half-way up the leaf. The flowers, which conſiſt each of one leaf divided into four parts, are of a yellow colour, and grow in ſpikes of two feet long, though only three or four open at a time.

The ſeed-veſſels are oblong and pointed, and dividing in the middle when they are ripe, diſcloſe the ſmall browniſh ſeed. The root is ſingle, fibrous, and, conſidering the ſize of the plant, ſmall. It flouriſhes in July.

The leaves are believed to have pectoral virtues, and thoſe which grow from the root before the ſtalk riſes, are eſteemed the beſt. They are given in a decoction to reſtrain the overflowings of the periodical evacuations, the bloody fluxes, and moſt other internal hæmorrhages; they are alſo ſaid to make an excellent poultice for the piles, and other painful ſwellings, and for this purpoſe are to be boiled tender in milk. The decoction is likewiſe recommended to relieve colic pains, when they are occaſioned by acrid humours in the bowels.

Muſtard.

THIS is a very common plant, of a rough appearance, which grows wild in many parts of England, but is kept alſo in gardens for the ſeed. It riſes to the height of a yard. The ſtalk is round, ſmooth, ſtout, and of a paliſh green colour, and much branched. The leaves are large, rough, hairy, and of a coarſe green, deeply indented, and placed irregularly on the ſtalk. They hang down, and are by no means elegant. The flowers, which are ſmall, being compoſed of four leaves each, are of a yellow colour, grow many together on the tops of the branches, but flower by degrees, ſo that before the whole blowing is finiſhed, the ſeed-pods reach a conſiderable way down the ſtalk, they are of a ſquariſh figure, pointed at the ends, and full of round ſeed, of a dark brown colour, and biting taſte. The whole plant is of an acrid pungent taſte. The root is white, branched, and full of fibres; it grows in waſte places, on the tops of old hedges, and among rubbiſh, and flowers in June.

The ſeeds of *muſtard* are uſed medicinally, and the common ſauce uſed under that name, is made of them; and this is extremely wholeſome, ſtrengthening the ſtomach, and procuring an appetite. It is alſo of ſervice in diſorders of the head, apoplexies, lethargies, and palſies. The ſeed, bruiſed and taken in conſiderable quantities, either in wine or ale, operates by urine, and is an excellent remedy for rheumatic and ſcorbutic complaints. It alſo promotes the female diſcharges; and, externally applied, is drawing and ripening: laid upon the tongue, bruiſed, it has been known to reſtore ſpeech to thoſe who have been unfortunately deprived of it by paralytic ſeizures.

Treacle Muſtard.

THIS ſmall wild plant grows commonly in dry places, in moſt parts of the kingdom. It riſes about eight inches high; the ſtalk is round and channelled. The leaves are of an oblong ſhape, broad, of a pale green, indented about the edges. They grow without regularity on the ſtems, and are deſtitute of foot-ſtalks. The flowers, which are very ſmall, grow in little tufts at the tops of the ſtalks, and the ſeed-pods follow them; ſo that when the plant is in flower, it appears to be a ſhort ſpike of the pods, with a ſmall cluſter of flowers on the top. The ſeed-pods are large, of a flattiſh round ſhape, and edged with a leafy border. The ſeeds are ſmall, of a brown colour, and of an acrid pungent taſte. The ſeed is uſed for nearly the ſame purpoſes as that of the plant laſt deſcribed, but the ſeeds of the garden creſs are frequently ſold inſtead of theſe. It is not in much reputation.

Mithridate Muſtard.

THIS is alſo a wild plant, and frequently met with in corn-fields. It is of the height of a foot; the ſtalks round, ſtrong, erect, and not much divided into branches. The leaves, which are long and narrow, are ſomewhat hairy, and of a dull green colour. The flowers are ſmall and white, and theſe are ſucceeded by ſmall and round ſeed pods, but not flatted, as in the former kind, nor ſurrounded with a leafy edge. The leaves grow in very great numbers upon the ſtalk, each having a couple of ſmall ones ſpringing from the baſe.

The ſeed of this is alſo the part preſcribed medicinally; but, like the former, the creſs-ſeeds ſerve for it; nor is the impoſition of much conſequence, as they poſſeſs nearly the ſame qualities, and are neither of much importance.

Sweet Navew, or Garden Navew.

THIS plant, which is only found in gardens, is not unlike the common turnip in appearance. It grows a yard in height, on the ſtalk, which is round, ſmooth, and of a pale green colour. The leaves ſtand irregularly, and are of an oblong ſhape, broad at the baſe where they encompaſs the ſtalk, and growing narrower towards the extremity. Thoſe leaves which ſpring immediately from the root, are of much larger ſize, and are deeply indented at the ſides, of a pale green colour, inclining to blue; and theſe leaves lie on the ground. The flowers, which are ſmall and of a yellow colour, each being compoſed of four leaves, are ſucceeded by pods containing round and black ſeed. The root is white and large, reſembling the turnip in taſte, but not in manner of growth, which is more like a parſnip.

The ſeeds are directed to be uſed medicinally, but they are in no great reputation. A decoction of them is ſaid to be perſpirative, and to force any thing out to the ſurface of the body; and it was formerly in high eſteem to expel poiſons, either taken internally, or received from the bites of venomous creatures.

Wild Navew.

THIS plant produces that ſeed which is known in ſome places by the name of *rape ſeed*, and in others of *cole ſeed*. It grows wild in ſome parts of England, but is commonly ſown not only for the ſake of the ſeeds, from which an oil is procured for certain mechanical purpoſes, but of late years by way of food for cattle, ſome kinds of which are extremely fond of it. It grows two or three feet high, the ſtalk is round, erect, ſmooth, ſtrong, large, and of a pale green colour. The leaves, which grow from the root, are long and narrow, very deeply indented at the edges, and of a pale green colour, with a blue caſt. Thoſe on the ſtalk differ principally in ſize, being much ſmaller, they are alſo leſs divided. The flowers, which are ſmall and of a bright yellow colour, are ſucceeded by long pods, containing round, large, and black ſeeds; theſe are of a biting ſharp taſte, and are uſed for the ſame purpoſes as thoſe of the laſt mentioned, but are ſuppoſed to poſſeſs more virtues, though neither of them ſeem to have ever been in very great credit.

Nettle.

THOUGH it may ſeem unneceſſary to deſcribe a weed ſo univerſally known, yet as it has medicinal qualities, it ought not to be omitted. It riſes three feet high. The ſtalks are angular and rough. The leaves, which ſtand in pairs, are large and of a regular ſhape, narrowing gradually from a broad baſe to a ſharp point, and finely indented round the edges; theſe, as well as the ſtalks, are of a dull green, and both are covered with a kind of prickles, which eaſily make their way into the ſkin, and having at their baſes hollow bags of an acrid juice; it gets into the wounds, and occaſions that ſwelling, inflammation and pain, which the touch of the *nettle* always produces. Theſe bags at the bottom of the prickles, are diſcoverable by the naked eye, on the ſtalk of a full grown nettle; but, by the help of a microſcope, they are ſeen on every part of the plant. The flowers of the nettle are of a yellowiſh white, ſmall, and inconſiderable; the ſeeds are ſmall and round; but of theſe plants, ſome bear large flowers and no ſeed, others ſmaller flowers ſucceeded by the ſeeds. The root is ſpreading, ſmall, and fibrous.

The nettle is ſaid to be cooling and aſtringent; the juice is recommended to reſtrain overflowings of the monthly diſcharges, and moſt other internal hæmorrhages and fluxes. The root, taken in infuſion, works powerfully by urine, and is eſteemed a medicine highly efficacious in the jaundice. The ſeed has been preſcribed in coughs, aſthmatic diſorders, and other complaints of the lungs.

Roman Nettle.

THIS is another wild plant of the nettle kind, but by no means ſo common. It grows two feet high, the ſtalks are more round than thoſe of the common nettle, and of a deep green colour. The leaves are neither ſo large, rough, or ſo hairy as thoſe of the common ſort; but, like them, are broad at the baſes, narrowing to the point, and deeply indented, and full of ſmall ſhining prickles, rather more ſharp and ſtinging than the common. The flowers are ſmall, and make no appearance; each of theſe is however ſucceed by a round ball as big as a large pea, ſtanding on a long foot-ſtalk, of a deep green colour, and full of ſmall brown ſhining ſeeds, in ſhape ſomewhat reſembling lint-ſeed. This plant is found, but not very commonly, in ſeveral parts of Great Britain, and particularly about Romney Marſh, and Yarmouth.

The ſeeds are uſed medicinally, and are ſaid to have pectoral virtues, and to be ſerviceable in coughs and defluxions on the lungs, aſthmatic complaints, and hoarſeneſs; and for theſe purpoſes are greatly preferable to thoſe of the common nettle, which are too often ſubſtituted for them. They are adminiſtered in the manner of a tea, which may be ſweetened with honey.

Common Nightſhade.

THIS plant over-runs gardens and moſt other cultivated places, nor can it be kept under without continual weeding. It riſes to the height of two feet. The ſtalks are round, thick, but not very upright or ſtrong, very much branched, and of a duſky green. The leaves, which ſtand on foot-ſtalks, are broad and round, terminate in a point, and are of a dark green colour. The flowers, which grow in ſmall cluſters, ten or a dozen in each, are compoſed of one leaf, cut into five parts; they are white, with a yellowiſh centre, and are ſucceeded by ſmall round berries, at firſt green, but as they ripen turning to a ſhining black; they contain a pulpy juice, and ſeveral ſmall white ſeeds of a flattiſh ſhape.

The leaves are to be uſed freſh, but not internally. They are ſaid to be cooling, and may be applied, bruiſed, to inflammations and hot ſwellings, ſhingles, ſcalds, burns, and troubleſome eruptions on the ſkin.

Deadly Nightſhade.

THOUGH this plant may unqueſtionably be eſteemed poiſonous, yet even thoſe which ſeem to be the outcaſts of nature, in ſome inſtances act as her handmaid. This grows wild on banks and by way-ſides, and is of a dull and diſagreeable appearance. It grows four or five feet high. The ſtalks are angular, and of a dark green colour. They are beſet with broad and flat leaves, reſembling in ſhape thoſe of the common nightſhade, but much larger, and of a dull dead green. The flowers are of a duſky brown, with a caſt of green on the outſide, and purpliſh within, are coarſe, hollow, and bell-ſhaped, and ſtand ſingly on long foot-ſtalks, riſing from the boſom of the leaves. Theſe flowers are ſucceeded by large, ſhining, round, and (when ripe) black berries, of the bigneſs of cherries, full of a pulpy matter of a ſweetiſh and mawkiſh taſte, intermixed with ſmall flat ſeeds. The root is long, thick, and ſpreading: it grows in ſeveral parts of England, upon banks and way-ſides. The berries are of a poiſonous nature, and have often proved fatal to children; but, externally applied, the leaves are cooling and ſoftening; of uſe to cleanſe the ſkin of ring-worms and tetters; and, as well as the common ſort, frequently uſed as pouſtices to hard ſwellings, and particularly thoſe of the breaſt; and as they have very great virtues in this reſpect, the plant ſhould be kept out of the way of children, or never be permitted to perfect fruit within their reach, as the leaves only are wanted.

The Oak.

THIS noble and beautiful tree, a native of Great Britain, and conſtituting it's higheſt ornament and chief defence, grows in ſome places very tall, but the diſpoſition of it's branches are beautifully irregular. The trunk is very large; the branches, which generally ſpread in a circular form, are alſo large and frequently crooked. The bark is brown and unequal. The leaves, which are large, of an oblong ſhape, broad and deeply indented at the edges, are of a ſhining and lively green colour; the flowers ſcarcely perceivable. The fruit is the acorn, and not the galls, or, as they are more commonly called, the apples, which are occaſioned by wounds made by an inſect. There are varieties of this tree; ſome bearing the fruit on long foot-ſtalks, and the leaves on ſhort, and others the contrary. The bark of the oak is well known as a powerful aſtringent, ſtopping purgings, and reſtraining overflowings of the monthly diſcharges, for which it is to be given in powder. A decoction of it is recommended to help the falling down of the uvula, or palate of the mouth, and whenever a ſtyptic or very operative aſtringent is required, oak bark may claim the preference over moſt others: conſidering the many virtues it poſſeſſes in this way, it is aſtoniſhing that it ſhould be ſo little in uſe, and it's qualities ſo ſeldom enquired into.

Oak of Jeruſalem.

THIS ſmall plant is a native of warmer countries, but is kept in the gardens of Great Britain, the leaves have been ſuppoſed to reſemble thoſe of the oak tree, and from thence it takes it's name. The ſtalk is ſixteen or eighteen inches high, round, angular, more or leſs channelled, and of a light green colour. The leaves, which are of a yellowiſh green colour, and of a rough ſurface, are longer and narrower than the leaves of the oak; but, like them, are pointed at the ends, and deeply indented at the ſides. The flowers, which ſtand in great numbers of long ſpikes on the extremities of the branches, are round, greeniſh, and moſſy, and grow in bunches. The whole plant emits a very agreeable ſmell, and eſpecially the leaves, and thoſe young ſhoots which afterwards bear the flowers.

The freſh plant is recommended in aſthmatic complaints, hoarſeneſſes, and coughs, and is ſaid to be generally a good pectoral. It is alſo given to promote the female diſcharges; both thoſe which are periodical, and thoſe which ſucceed delivery; in the latter caſe the leaves and ſtalks may be made into a decoction, and the patient is to ſit over a proper veſſel half filled with it, in order to receive the ſteam. Internally, it may be adminiſtered in tea or infuſion.

The Onion.

THIS plant is too well known in our gardens to require a minute deſcription. It riſes about two feet, or two feet and a half high. The root is large, round, flat, and bulbous, being compoſed of ſeveral fleſhy coats one above another, the whole covered with a thin ſkin of a gloſſy brown colour, and having a bunch of fibres at the lower extremity. The leaves are hollow tubes, long, round, and of the ſize a man's finger. The ſtalk is alſo round, and bears at the top a round cluſter of ſmall ſix-leaved flowers of a mixed purpliſh and greeniſh colour, and each of theſe is ſucceeded by three ſquare black ſeeds. The whole plant is of a very ſtrong and pungent ſmell, and particularly the root, making the eyes water of thoſe who are unaccuſtomed to peel or cut it. The roots are uſed medicinally; they are not only a wholeſome food, but aſſiſt in relieving old coughs and complaints of the breaſt. A ſyrup made of the juice of theſe roots with honey, is preſcribed for an aſthma, and beaten up with a little ſalt, they are applied as cataplaſms to burns and ſcalds with great ſucceſs.

The Orange Tree.

THOUGH this elegant and uſeful tree is not a native of this country, but of Spain, Italy, and the eaſt, yet even here, under proper ſhelter, it grows to a conſiderable magnitude, and produces fruit in ſome degree of perfection. The branches ſpread irregularly; the bark of the trunk is brown and rough, that of the branches is ſmooth, of a greeniſh colour, and armed with ſeveral ſharp thorns. The leaves are large, of a pale yellowiſh green colour, of an oblong ſhape, and moderately broad, ſomewhat reſembling bay leaves, only that the foot-ſtalks of theſe have edges of a leafy matter on each ſide, giving the whole a figure ſomewhat like a heart. The flowers, which grow on the young ſhoots among the leaves, are each a ſingle cup-faſhioned leaf, divided into five parts, with yellow threads in the middle; they are extremely beautiful, and highly odoriferous. The fruit is large, round, firſt green, but ripening to a deep yellow inclining to red. The ſkin is rough, and covers a pulp compoſed of a great number of ſmall veſſels full of a pleaſant acid juice, among theſe veſſels the ſeeds are alſo ſcattered, which are long, and pointed at the ends.

The *ſour* or *Seville orange*, is the kind uſed in medicine. The juice is applied to the ſame purpoſes as that of lemons, and may be preſerved in the ſame way; and a ſyrup equally pleaſant, though for other occaſions, may be made of the infuſion of the peel. But the great uſe of this part of the Seville orange, is in tincture or infuſion, as a ſtomachic bitter; and for this purpoſe only the yellow part is to be pared off very thin, and put into brandy or wine; or an infuſion may be made of it by pouring boiling water on it, either freſh or dry. This tincture or infuſion is of itſelf cordial and ſtomachic, ſtrengthening and warming that organ; but it may receive ſome improvement by the addition of ſliced gentian root, and bruiſed cardamom ſeeds, and then becomes an excellent medicine for the ſtomach, and much better than any other compoſition for bitters.

Orpine.

THIS is a wild plant, of a pleaſing appearance, which is frequently found in hedges and other ſhady places. It grows a foot or more high. The ſtalk is round, channelled, fleſhy, and brittle; on theſe grow alternately the leaves, which are of a fat ſubſtance, oblong, broad, indented about the edges, and of a bluiſh colour, inclining to green. The flowers, which are ſmall, but of a beautiful red or purpliſh colour, grow in ſmall cluſters, and are each compoſed of five leaves ſpreading like a ſtar; theſe flowers are ſucceeded by crooked ſeed-veſſels, bent or horned at the extremities, and each containing ſeveral ſmall ſeeds. The root is white and large. The whole plant has a fleſhy appearance, and will grow a long time after it has been taken out of the ground.

The juice of the leaves and tops of *orpine*, is ſaid to be cooling and aſtringent, and particularly ſerviceable in the bloody flux. The moſt palatable way of adminiſtering it is in a thin ſyrup, made with the fineſt ſugar, and the addition of a ſmall quantity of cinnamon.

Oxeye.

THIS wild plant grows commonly in ſome parts of the north of England, but in few other parts of the kingdom. It reaches the height of a foot and a half. The ſtalk is round, ſtrong, and much branched. The leaves, which are numerous, are each winged or divided into a number of fine parts, ſomewhat reſembling the leaves of yarrow, but ſhorter, more ſtiff and rather hoary or whitiſh. The flowers, which are large and of a yellow colour, and much like a marigold, ſtand ſingly at the tops of the branches.

Palma Chriſti.

THIS plant is a native of warmer climates, but kept in our gardens, more for ornament than uſe. The trunk is thick, and woody towards the bottom. It riſes to the height of ſix feet, and the upper part is covered with a ſort of meal or powder, of a greeniſh blue caſt. The leaves, which are large and very elegant, ſomewhat reſembling thoſe of the vine, are divided deeply into ſix, ſeven, or even more parts, which are alſo ſharply indented at the edges; they ſtand upon long footſtalks, which extend to the middle of the leaf, and are there joined to it. The flowers are very inconſiderable, of a duſky green, and grow in cluſters toward the top of the plant. The ſeeds are found upon the trunk of the plant in different places, and are contained in huſks, but individually covered with a hard ſhell.

The kernels, or inner parts of the ſeeds, are uſed medicinally, but they are at preſent of no great reputation; three or four kinds of them were formerly kept in druggiſts ſhops under different names, but they are now ſeldom enquired for. They operate violently both as purgatives and emetics, and were uſually given in dropſies and rheumatic complaints.

Parſley.

THIS very common and medicinal herb grows two feet in height. The leaves, which are compoſed of a vaſt number of ſmall parts, are divided firſt into three, and then into a vaſt number of ſubdiviſions. They are of a lively green, and indented. The ſtalks, which are round, angular, or deeply channelled, ſmall and erect, are alſo much branched; the flowers, which are ſmall and white, ſtand in large tufts at the extremities of the branches; the ſeeds are roundiſh and channelled. The root is long and white, and ſomewhat fibrous.

The roots are uſed in medicine, and are recommended in a ſtrong decoction for the jaundice. It operates powerfully as a diuretic, and removes obſtructions.

Parſley Pert, or Parſley Breakſtone.

THIS ſmall wild plant is commonly found in dry fallow grounds, and among corn. It has ſmall pale leaves, and hairy ſtalks hanging down. It does not exceed three or four inches in length, and ſeldom ſtands perfectly upright. The leaves ſtand irregularly on the ſtalks, which are round and hoary, are narrow at the baſes and broader at the extremity, where they divide into three parts, each of them rounded. The flowers grow in bunches at the joints, and are of a duſky green colour. Theſe are ſucceeded by ſmall and round ſeeds. The root is fibrous, and of inconſiderable ſize.

The whole plant may be uſed in medicine, and is beſt freſh, in which ſtate an infuſion of it has the reputation of being an excellent remedy for the gravel, operating violently, but not injuriouſly, by urine: it removes obſtructions of the liver, and is therefore uſeful in the jaundice; and an opinion formerly prevailed, that it had a power of diſſolving the ſtone in the bladder; but this does not appear to be well founded, though it may probably at leaſt contribute to afford eaſe in this dreadful diſeaſe.

Macedonian Parſley.

THIS is a garden plant, where it grows two feet high. The ſtalk is ſmall, divided into many branches, and hairy. The leaves conſiſt of many parts, each of which is ſmall and rounded. Thoſe on the higher part of the ſtalk are more finely divided than towards the foot. The flowers, which are ſmall and white, and not unlike thoſe of common parſley, ſtand like them in tufts on the tops of the ſtalks, and are ſucceeded by ſmall and ſomewhat hoary ſeeds, of a duſky colour, and aromatic taſte.

The ſeed is uſed to expel wind, and relieve the colic; it is uſually given in powder, and operates chiefly by urine: it is alſo recommended to remove obſtructions of the monthly evacuations, and as a remedy for the gravel. Some have preſcribed it in the dropſy and jaundice.

Wild Parſnep.

THIS plant grows commonly about hedges and way-ſides, and riſes to three feet. The ſtalk is ſtraight, erect, round, channelled, and of a yellowiſh colour. The leaves, which are compoſed of many large diviſions, reſemble thoſe of the *garden parſnep*, but are much ſmaller and hairy. The flowers are ſmall and yellow, and grow not only at the tops of the ſtalks, but on the ſides, in large round tufts; the ſeeds are flat and of an oval figure like thoſe of the cultivated ſort. The root is long, white, and well taſted, but not ſo large as the garden parſnep, and this is uſed in a ſtrong decoction which operates by urine, and removes internal obſtructions. It is recommended againſt the gravel and jaundice, and to bring down the periodical diſcharges.

The Peach Tree.

THIS tree, though not originally of Britiſh growth, is now found againſt every garden wall. The trunk is covered with a rough bark, and the branches grow irregularly, unleſs they are trained by art. The leaves are long, narrow, and elegantly but thinly indented at the edges. The bloſſoms, which are large, are of a pale red, inclining to purple. The fruit is too univerſally known to require deſcription. It conſiſts of a ſoft and delicious pulp, under a downy ſkin, in the middle of which is one hard ſtone, containing a kernel of an agreeable,

able, though bitter taſte. It flowers in March and April, and the different kinds of fruit ripen in Auguſt, September, and October.

The flowers only are uſed in phyſic; a pint of boiling water is directed to be poured on a pound weight of peach bloſſoms, plucked from the cups; after it has ſtood four and twenty hours, it is to be ſtrained through a ſieve, without preſſing, and two pounds of loaf ſugar being diſſolved in it over the fire, it becomes a pleaſant ſyrup, and is given to children to carry off thin watery humours, and deſtroy worms. It purges gently and ſometimes acts emetically, but not without violence.

It may always be kept as a convenient and uſeful laxative, and is fit for children in moſt caſes.

Pellitory of the Wall.

THIS plant commonly grows wild on old walls, where it riſes a foot high, but is ſeldom perfectly upright. The ſtalks, which are round, brittle, ſomewhat hairy, and jointed, are often inclined to a purpliſh colour. The leaves, which ſtand upon them without regularity, are about an inch long, broad in proportion in the middle, and narrower at each extremity. The flowers, which ſtand cloſe to the ſtalks, are ſmall and ſcarce obſervable; they are of a whitiſh green colour when they are open, but the bud is reddiſh.

The whole plant may be uſed in medicine. An infuſion of it freſh, operates by urine, and is ſaid to be very ſerviceable in the jaundice, and to give immediate eaſe in violent fits of the gravel and ſtone, being taken in conſiderable quantities. It is equally beneficial in ſtranguries, and ſuppreſſion, retenſion, or heat of urine.

Penny-royal.

THIS plant grows wild in marſhy places in ſome parts of England, but is alſo much cultivated in gardens. The ſtalks are a foot long, round, and ſometimes of a reddiſh colour. They commonly creep on the ground. The leaves are ſmall, broad, but pointed at the ends, ſtand two at each joint, and are of a pale green colour. The flowers grow round the joints, juſt above the leaves, in thick cluſters, they reſemble thoſe of mint, and are of a pale red colour, but the cups in which they ſtand are green and ſomewhat hairy. The whole plant has a very ſtrong penetrating ſmell, and an aromatic though not diſagreeable taſte.

Every part of this plant is uſed medicinally, either freſh or dried; but that which is found wild is ſaid to be more efficacious than the larger kind cultivated in our gardens. It may either be taken diſtilled to a ſimple water, or in tea or infuſion. It operates by urine, and promotes the female diſcharges, as well the periodical as thoſe after child-birth. It is an excellent remedy for aſthmatic complaints, coughs, and pains in the breaſt, and even the whooping-cough has been relieved by a ſtrong decoction of it. It is eſteemed uſeful alſo in the colic, and to remove obſtructions.

Periwinkle.

THIS pretty plant is found wild in ſhady banks and dry ditches in ſome parts of England, but is more commonly kept in gardens. The roots are creeping ſtrings and fibrous, and ſend forth numerous ſtalks, a foot or more in length, but they do not ſtand upright: they are round, green, and tough, and either lie upon the ground or riſe and twine about pales or other plants. The leaves are oblong, broad, of a ſhining green colour, particularly ſmooth on the ſurface, and ſtanding two at each joint. The flowers, which are large and blue, and reſemble in ſhape the flowers of jeſſamine, though they are rather more pointed, ſtand on long footſtalks; they are ſometimes ſucceeded by two longiſh pods, each containing ſeveral ſeeds; but theſe do not often come to perfection.

This is called a vulnerary plant, and the leaves and ſtalks may be boiled in water, and the decoction drank with a mixture of red wine, in which way it reſtrains the overflowings of the monthly diſcharges and other internal hæmorrhages. It alſo ſtops the bleeding of the piles, and is uſeful in the whites, and other diſcharges occaſioned by weakneſs.

Pimpernel.

THIS ſmall plant is common in cornfields, dry ditches, and borders. The ſtalks are angular, ſmooth, and green, but not erect. They ſometimes run five or ſix inches long. The leaves, which ſtand oppoſite each other at the joints, are of an oblong form, broad in the middle, and growing narrower and pointed at the ends. The flowers, which ſtand ſingly on long and ſlight foot-ſtalks, are ſmall, and of a beautiful bright ſcarlet colour.

The whole plant may be uſed medicinally, and may be given in decoction; but perhaps an infuſion made by pouring boiling water upon it freſh-gathered, may be a rather better way, and may be uſed as a common drink in fevers, encouraging ſweat, and helping to throw out eruptions, where that is neceſſary. The leaves may be dried and powdered, and taken in this way by thoſe who cannot ſwallow much liquid, but the infuſion is certainly beſt.

There is alſo a *female pimpernel*, which differs only from this which is called the *male pimpernel*, in the colour of the flowers, which in this is blue. It is alſo ſaid to be inferior in virtue to the other ſort.

The Pine Tree.

THIS beautiful tree is a native of Italy, where it grows to a very great ſize, as well as in other parts of the world. It is in every plantation in England: and in North-Britain the Scotch fir flouriſhes ſpontaneouſly; but this is not the ſame tree. The trunk of the true *pine* is covered with a rough bark of a dark brown colour; that on the branches is ſmoother, and more inclining to red. The leaves, which are long and ſlender, grow always two together from the baſe, or out of a common ſheath; they are of a green colour, with a blue caſt, and are ſomewhat hollowed on the inner part. The flowers, which ſtand in a kind of tufts on the branches, are ſcarce diſcoverable; the cones are of a brown colour, large, long, and obtuſe at the extremities. Between the ſcales of theſe, certain white kernels are found of a ſweet taſte, and covered with a thin brittle ſhell.

Theſe kernels are the part uſed in medicine, and they are preſcribed in conſumptions, and by way of reſtorative, when the body has been worn down by diſeaſe; they may be beat up to an emulſion with barley-water, and are recommended alſo for coughs and hoarſeneſs, and for retenſion and heat of urine.

The Wild Pine Tree.

THIS tree, which grows in the woods in many parts of Germany, very much reſembles the *pine* before deſcribed. This alſo grows to be a large and tall tree, the trunk being like the former, covered with a rough brown bark; that of the branches is paler and more ſmooth. The leaves are more narrow and ſhort than the other ſort, but theſe alſo grow two out of a caſe or huſk as the other, and are of a like bluiſh green colour: the principal difference in the leaves is, that theſe are ſhorter. The flowers, which are yellowiſh, but very ſmall and without beauty, are ſucceeded by cones ſmaller than the others, but hard, and ſharp at the tops; the kernels are found among the ſcales as the other, but theſe alſo are ſmaller. They have the ſame virtues as thoſe of the other pines, but are not ſo much regarded on account of their inferiority in ſize.

Turpentine, as it is called with us, is the reſin which flows from this tree, either naturally or when it is cut for that purpoſe. It is a whitiſh thick ſubſtance like honey, of a ſtrong and diſagreeable ſmell, and worſe taſte.

This turpentine being diſtilled to make oil of turpentine, the ſubſtance which remains is common reſin; if the fire is extinguiſhed early enough it is yellow reſin, if it is continued long it is black reſin; but common reſin is ſometimes obtained by boiling the turpentine in water without diſtilling it, and if this is taken out half boiled, it is what is called burgundy pitch. The whitiſh reſin, which is called *thus*, or *frankincenſe*, is of a different nature from *olibanum*, or the *fine incenſe*, which is the reſin flowing naturally from the branches of this tree, and hardening into drops upon them. The difference between this and the common turpentine, is moſtly in it's being leſs offenſive to the ſmell: it's qualities are nearly the ſame.

Reſin of all kinds, tar and pitch chiefly, are uſed in plaiſters and ointments, as well as the common turpentine. The finer turpentines are given inwardly, and are procured from the turpentine tree, the larch tree, and the ſilver fir. Both the yellow reſin and the black are ſometimes taken internally in pills, in which way they are recommended as a remedy for the whites, and the diſcharges which remain after venereal injuries; but for theſe purpoſes, ſome better ſort of turpentine ſhould rather be boiled to the conſiſtence, and adminiſtered.

Piony.

THIS flower is common in our gardens, but it is as uſeful as it is ornamental, though not the common double piony which is called the *female piony*. The ſingle flowered one, which is diſtinguiſhed by the name of the *male piony*, is the kind uſed in medicine. This grows to the height of two or three feet. The ſtalk is round, channelled and branched. The leaves, which are of a deep green colour, are each compoſed of ſeveral others. The flowers, which are of a conſiderable ſize, are of a deep purple or crimſon colour, with a green head in the midſt; and when the flowers are withered this head ſwells into two or more ſeed veſſels, which are externally whitiſh and hairy, but red within, and full of ſhining black ſeeds lying in regular order. The roots, which are compoſed of a number of longiſh or roundiſh lumps, connected to each other, and to the main ſource of the ſtalk by fibres, are brown on the outſide, and white within.

It is the root which is uſed medicinally; an infuſion of it promotes the periodical diſcharges, and the powder of it dried is ſaid to be beneficial in hyſteric and nervous complaints. It is ſtrongly recommended as efficacious againſt the falling ſickneſs.

Pitch Tree.

THIS is that well-known tree of the fir kind which is commonly called the *red fir*. It grows regularly to a very conſiderable height: the bark of the trunk is brown, inclined to red on the branches, the colour is not ſo ſtrong. The leaves, which are very numerous, ſhort, narrow, and of a deep green colour, and very thick, terminate in a ſharp and prickly point at the extremities. The flowers are yellowiſh, but ſcarce perceivable; the cone long and large, and differing from ſome other firs in hanging down, thoſe of the true fir-tree, or the yew-leaved fir, ſtanding upright.

The young ſhoots at the extremities of the branches are uſed medicinally. They are replete with a reſin of the turpentine kind, and may be given in decoction or brewed into beer, and in this form are preſcribed in rheumatic and ſcorbutic complaints; they work by urine, and are ſaid to heal ulcers of the urinary parts.

This tree produces tar and pitch. The tar ſweats out of the wood of it in burning, and the pitch is that tar boiled to a conſiſtence. To obtain tar, great quantities of the wood are piled up artificially, and fire being ſet to them at top, the tar ſweats out of the ends of the lower parts, and is received into a hollow or pit as it runs from them.

Broad-Leaved Plantain.

THIS plant grows commonly by way-ſides, and has broad ſhort leaves, and ſmall but long ſpikes of ſeeds of a brown colour. The leaves riſe immediately from the root, the ſtalks bearing none. Theſe leaves are of a figure inclining to oval, and indented at the edges, but without regularity, and ſometimes ſcarce at all. Theſe leaves have ſeveral large ribs not growing ſideways from the middle one, but all lengthways in the ſame direction, from the baſe of the leaf towards the point. The ſtalks riſe a foot high, but one half is naked, and the upper part thick ſet with flowers of inconſiderable ſize and mean appearance, and of a greeniſh colour, with a particular caſt of whiteneſs; theſe are ſucceeded by ſeeds, which are very ſmall, and of a brown colour.

The virtues of this plant have been very highly extolled. Every part of it may be uſed, but it is beſt freſh; and in that ſtate a decoction of it in water may be uſeful to reſtrain overflowings of the monthly diſcharges, violent purgings, with bloody ſtools, and vomiting of blood, and all other internal hæmorrhages, as well as the bleeding of the piles, and other diſorders of the like kind. The ſeeds powdered are preſcribed againſt the whites.

There is alſo another kind of *plantain* which has ſhort flowery ſpikes, and leaves broader and ſomewhat hairy. This poſſeſſes as much virtue as the kind before deſcribed. And beſides both theſe there is the *narrow-leaved plantain*; but this poſſeſſes leſs virtues than either of the other ſorts.

Plowman's Spikenard.

THIS tall, ſtrong, wild plant, grows commonly by road ſides, and in dry, hilly, and chalky paſtures, and riſes to the height of three feet. The root, which is branched, woody, and fibrous, ſends up ſeveral round, thick, ſtraight, and ſomewhat hairy ſtalks. The leaves which ſpring from the root are large and broad, thoſe on the ſtalk narrower; but both are blunt at the points, and ſomewhat indented at the edges. The flowers, which grow on the tops of the branches, ſpread into a large head or open cluſter from a ſingle ſtem; they are ſmall, and of a yellow colour. They paſs away in down, leaving long ſlender ſeeds; the leaves and flowers have a fragrant aromatic ſmell.

The leaves and young tops are uſed medicinally, and a decoction of them is recommended againſt internal hæmorrhages, and in pains of the ſide and ſhortneſs of breath. The root dried and powdered is ſaid to be a remedy for violent purgings, and the whites.

Poley-Mountain.

THIS plant is a native of the warmer parts of Europe, but is frequently to be met with in our gardens. It grows about ten inches high. The ſtalks are ſquare, and of a whitiſh colour; the leaves, which are oblong and narrow, are alſo of a white colour, and woolly to the touch; they ſtand at the joints in pairs, and are indented at the edges. The flowers are ſmall and white, growing in woolly tufts at the extremities of the branches; both leaves and branches are very agreeably ſcented, and may be uſed freſh, but are better dried. An infuſion of it promotes the periodical diſcharges, opens obſtructions of the liver, and is highly recommended in the jaundice and dropſy, operating by urine. It has alſo had the reputation of being an antidote to the poiſons communicated by the bites and ſtings of reptiles.

Candy Poley-Mountain.

THIS little plant is a native of the iſlands of the Archipelago, and is kept in ſome gardens in England. It does not grow above ſix inches high; the ſtalks are ſquare, white, feeble, and ſeldom erect; the leaves ſtand in pairs at each joint, and are narrow, oblong, and not indented at the edges. The whole plant is of a white woolly aſpect, like the laſt mentioned, and of an agreeable ſmell. The flowers, which are ſmall and white, and grow in tufts at the tops of the ſtalks, are ſtill more odoriferous. The cups, which contain the flowers, are very white.

The whole plant is uſed, and can only be had dried, for that which grows in England has but little virtue. It operates very powerfully by urine, and is recommended as a remedy for hyſteric complaints, but is a dangerous medicine to pregnant women, promoting the female diſcharges ſo violently, that it may occaſion miſcarriage.

Polypody.

THIS is a kind of fern, which ſeldom grows above a foot high, and conſiſts commonly of ſeveral leaves riſing from the ſame root, yet each is a ſeparate and compleat plant. The ſtalk is naked for four or five inches from the root, and from thence to the top is ſet on each ſide with a row of ſmall oblong and narrow leaves, or parts of leaves, with an odd one at the end, all very finely indented at the edges. The whole plant is of a lively green colour, but the backs of theſe leaves, or rather of the leaf, are, towards Autumn, marked with a great number of round ſpots, of a reddiſh brown colour, ſtanding in double rows, and theſe are the ſeeds. Thoſe of all the other ſeeds are produced nearly in the ſame manner. The root is long, ſlender, and full of ſmall knots, each appearing like the foot of an inſect, from which circumſtance it had it's name. It creeps upon old walls, and upon ſurfaces of old ſtumps of trees among the moſs. The root only is uſed, and it is beſt freſh. It is a ſafe, but very gentle purge, and may be given in a ſtrong decoction, in which form it alſo operates by urine. It is ſaid to purge bilious melancholic humours, and to be good in the jaundice and dropſies. It is alſo reputed to be an excellent ingredient in diet drinks, for the ſcurvy, and is indeed a ſafe and good purge on moſt common occaſions.

The Pomegranate Tree.

THIS is found wild in Spain and Italy, where it grows to the ſize of an apple-tree; with us it is only to be met with in gardens, and of very inferior ſize. The branches ſpread without regularity, and are covered with a reddiſh brown bark, having here and there a few thorns. The leaves, which are moſt numerous at the extremities of the branches, are ſmall, narrow, of an oblong form, and of a fine green colour. The flowers are large, and of a moſt incomparably beautiful deep red. The fruit is of the ſize of an orange, has a brown hard woody covering, and contains within a great quantity of ſeeds, ſurrounded by ſweet and pleaſantly acid juice.

The rind of the fruit is uſed medicinally; it muſt be dried and given in decoction, and is a powerful aſtringent, ſtopping purgings and bleedings of all kinds, and being alſo eſteemed uſeful in the whites. The juice of the fruit is grateful, and ſtrengthening to the ſtomach.

The Pompkin.

THIS large and ſtraggling plant is cultivated by poor people in many parts of England. The ſtalks, which are very long and thick, lie upon the ground, are angular and rough, and take up a great deal of room. The leaves are extremely large, of a roundiſh figure, reſembling thoſe of the onion, but pointed at the corners. They are of a dark green colour, and ſomewhat rough to the touch. The flowers are very large, and in ſhape and colour like a yellow lily. The ſtalks are furniſhed with tendrils or holders; and the fruit, which is of the melon kind, only bigger, is round, and of a deep green before it ripens, when it turns yellow. The contents are a fleſhy ſubſtance, among which are contained many large, white, oval, flat ſeeds. It is commonly ſown on dunghills, and the fruit ripens in September or October. Of the fleſhy part of the fruit, mixed with a quantity of ſour apples, the common people ſometimes make pyes. The ſeeds are ſaid to be uſeful in medicine, being cooling and diuretic; they are taken in emulſions made with barley-water, and make the mixture as milky as almonds. Some people prefer them to all the cold ſeeds for ſtranguries and heat of urine.

The Black Poplar.

THIS tree grows frequently about waters, riſing to a very conſiderable ſize, and making a very handſome appearance. The bark on the trunk is ſmooth and pale; the branches, which are numerous, ſeem to ſhoot in a form of natural regularity. The leaves are ſmooth and ſhining, ſtand on long foot-ſtalks, are ſhort and broad, round at the baſe, but terminating in a point; both the branches and leaves are ſubject to large ſwellings or excreſcences, occaſioned by ſmall inſects. The flowers are inconſiderable, and the catkins which bear them and the ſeeds are longiſh and looſe. They appear early in the ſpring, and are little noticed.

The leaves and buds of the *Black Poplar* are uſed in poultices with other herbs, and applied to hard painful ſwellings; but their efficacy is rather doubtful. An opinion hath prevailed, that a decoction of the buds will aſſiſt the growth of the hair, and thicken it.

The White, or Garden Poppy.

THIS plant is a native of the warmer climates, but cultivated in our gardens for medicinal uſes. It riſes to the height of four or five feet; the ſtalk is round, ſmooth, erect, and of a bluiſh caſt; the leaves, which are very long, and of proportionate breadth, are deeply and irregularly notched and divided at the edges, and are nearly of the ſame colour as the ſtalks; they ſtand on the ſtalk without regularity, and in ſome meaſure encompaſs it. The flowers are very large and white, ſtanding ſingly at the tops of the ſeveral diviſions of the ſtalk into branches. Theſe flowers hang down, but become erect as they expand; each of them conſiſts of four large white leaves, incloſed in two ſhining huſks or films, which drop off as the flower opens, and are ſhortly ſucceeded by the flower itſelf, and when that is fallen, the ſeed-veſſel or poppy-head grows to the bigneſs of a large apple, having a kind of crown on the head, and being divided by membranes into ſeveral partitions, each of which contains a great quantity of ſmall whitiſh ſeeds.

The whole plant is full of a thick milky juice, of a ſtrong, bitter, and acrid taſte, much reſembling that of opium; and, as well as the ſmell, equally diſagreeable.

The heads, and ſometimes the ſeeds, are uſed medicinally in this country; the former, boiled in water, make the ſyrup of diacodium: for this purpoſe the heads are dried, and the decoction is made as ſtrong as poſſible, and then brought to a ſyrup with ſugar. The ſeeds are beaten up in emulſions, and are ſaid to be uſeful againſt ſtranguries and heat of urine; and theſe do not poſſeſs the ſleepy quality of the ſyrups, nor of the other parts or preparations of the poppy. Syrup of diacodium inclines thoſe who take it to ſleep, but in a much leſs degree than opium or laudanum, and is therefore a ſafer medicine.

Opium, the beſt ſort of which is imported from Turky, is the milky juice of this plant, hardened. It is obtained by making inciſions in the heads while they are ſtill upon the plant; and the milky juice which flows out of the wounds is thickened by the ſun, and in that ſtate is gathered and mixed together in thoſe lumps in which it is brought to England. An inferior kind is alſo made by bruiſing and ſqueezing the heads and liquid. Liquid laudanum, or, as it was formerly called, the thebaic tincture, is a tincture of this opium made with wine; both this and the ſolid opium are indifferently given to compoſe the ſick to ſleep, and to abate the torturing ſenſe of pain. They are alſo cordial, promote perſpiration, and reſtrain violent purgings and vomitings; but in all caſes they ſhould be adminiſtered with great care and caution, for they are very powerful, and in thoſe laſt mentioned, in very ſmall doſes, however frequently it may be neceſſary to repeat them.

Opium, muſk, and cinnabar, are the medicines which ſeem moſt to be depended on for the cure of the bite of a mad dog; but it does not appear that the effect of them is certain, after the ſymptoms of madneſs have appeared. It is ſaid they have in ſome inſtances ſucceeded, but have failed in many more. In the locked jaw, and other violent ſpaſmodic attacks, even the external uſe of it is recommended, as well as the internal.

Black Poppy.

THIS plant is alſo a beautiful exotic, but not ſo elegant as the former. It does not grow above a yard high. The ſtalk, which is round, ſtraight, ſtrong, and ſmooth, divides towards the top into ſeveral branches. The leaves, which in proportion to it's ſize are as long and broad as thoſe of the *white poppy*, are of the ſame bluiſh green colour, and deeply and irregularly indented at the edges. The flowers are however very different; they are large and ſingle, of a dull purple colour, with a black bottom. The heads or ſeed-veſſels are round, but ſeldom exceed the bigneſs of a walnut; they contain black ſeed.

This poppy is ſeldom uſed, though the ſyrup of it inclines to ſleep more ſtrongly than the common diacodium. The gentle operation of that medicine has recommended it, and when a more powerful one is neceſſary, opium or laudanum are the moſt effectual.

Red or Wild Poppy.

THIS plant is univerſally known, being found in corn fields, where it's large ſcarlet flowers are very diſtinguiſhable. It grows about a foot high. The ſtalk is round, ſlender, rough, branched, ſomewhat hairy, and of a pale green. The leaves are long and narrow, of a dull green, hairy alſo, and very deeply but regularly divided into ſeven or nine parts, that at the extremity being the largeſt. The flowers are large, and of a beautiful bright ſcarlet colour, with a black ſpot towards the bottom. The head ſeldom exceeds the ſize of a very large pea, and contains many ſmall dark-coloured ſeeds. The ſtalks and leaves are full of a bitter yellow juice, of a ſtrong ſmell, but not ſo powerful as that of the two laſt mentioned plants, though it is diſtinguiſhable enough to be of the opium kind.

A ſyrup is made from the flowers, by plucking them from the cups, and pouring as much boiling water on them as will juſt cover them after they are cloſely preſſed down in the veſſel: after it has ſtood a night, the liquor may be ſtrained off and boiled to a ſyrup, with a proper quantity of ſugar, and this ſyrup gently promotes ſleep; and being a much leſs powerful medicine than the diacodium, it is highly recommended in pleuriſies and fevers; but, as it appears, without any good foundation. It's principal, and perhaps only virtue, is it's ſleeping quality.

The Primroſe.

THIS beautiful early ſpring flower is univerſally known. The leaves are of conſiderable length and breadth, of a pale green colour above, but whitiſh beneath, and wrinkled on their ſurfaces; they ſpring immediately from the root in great numbers. The ſtalks, each of which ſupports a ſingle flower, are ſlender, about four or five inches high, ſomewhat hairy, and naked of leaves. The flower is large, beautiful, and of a very pale yellow colour, with a yellow ſpot in the middle, the root fibrous and whitiſh. It grows in every hedge and thicket, and flowers in March and April.

The root is uſed medicinally; the juice of it being ſnuffed up the noſe, brings on ſneezing, and is ſaid to relieve violent head-aches. It may alſo be dried and powdered, but is not ſo powerful in that ſtate.

Privet.

THIS ſhrub grows wild in the hedges in many parts of Great-Britain. It ſeldom grows above four or five feet high. The branches are ſmooth, ſlender, tough, and covered with a brown bark. The leaves are of an oblong form, broad in the middle, but growing narrower towards both extremities. They are of a duſky green colour, and ſtand in pairs oppoſite to one another; are of ſubſtance rather firm, and are not indented at the edges. The flowers, which are ſmall and white, ſtand in tufts at the ends of the branches, and each flower is ſucceeded by a black berry, which does not ripen till September, though the flowers appear in May and June. The tops of the branches, and the leaves, are uſed in medicine, and are in perfection when the flowers juſt begin to bud. A ſtrong infuſion of them in boiling water, with the addition of a little honey and a ſpoonful of red wine, is an excellent gargle to waſh the mouth and throat when they are affected with ſores, or when the gums are ſubject to bleed.

Purſlain.

THIS is a common garden plant, uſed in ſallads, and of a very extraordinary appearance. It grows about a foot long, but great part of it trails on the ground. The ſtalks are large, round, and fleſhy, of a reddiſh colour, and extremely brittle. The leaves, which are ſhort, broad, and blunt at the extremities, are of a lively green, and are alſo thick and fleſhy. The flowers are ſmall, of a yellow colour, and ſtand among the leaves on the ſummits of the ſtalks. Theſe are ſucceeded by roundiſh ſeed-veſſels, containing ſmall, black, and ill-ſhaped ſeeds; the roots are ſmall, fibrous, and of a whitiſh colour.

It is ſaid to be an excellent remedy for the ſcurvy, and the juice expreſſed from the freſh herb, and mixed with a little white wine, works by urine, and is preſcribed to relieve ſtranguries and heat of urine, and in this way alſo is good againſt the ſcurvy. The ſeed is cooling and aſtringent, and is ſuppoſed to deſtroy worms.

The Quince Tree.

THIS tree, which is common in our gardens, ſeldom grows to the ſize of an apple-tree, and is of leſs growth. The trunk is large, and is covered with a brown bark. The branches are numerous, weak, and ſpreading. The leaves reſemble thoſe of the apple-tree, but are more round, of a duſky green on the upper ſurface, but hairy underneath. The flowers or bloſſoms are large, each being compoſed of five leaves, of a beautiful pale fleſh colour, or light purple. The fruit is ſhaped like a pear, is covered with a woolly down, and has a large crown: it is yellow when ripe, and of an agreeable ſmell, but the taſte is ſo auſtere that it can hardly be eaten without being baked, or made to a conſerve. The ſeeds are ſoft, but remarkably mucilaginous.

Both the fruit and ſeeds are uſed medicinally; the juice of the ripe *quince* makes a ſyrup which is recommended to ſtop vomitings and the hiccough, ſtrengthen the ſtomach, and reſtrain violent fluxes and purgings. The ſeeds boiled in water, give it a ſoftneſs and a mucilaginous quality, and bring it to the conſiſtence of a thick jelly; and this is an excellent medicine for ſore mouths, and chopped nipples; it may alſo be uſed to ſoften and moiſten the mouth and throat in violent fevers.

The Radiſh.

THE root of this common plant is eaten in great abundance in the ſpring; and at this ſeaſon is long and ſlender, of a purple, ſcarlet, or pink colour, (for there are different ſorts) on the parts next the leaves, and white below. From theſe roots ſpring a quantity of large, rough, hairy leaves of a dark green colour, and irregularly divided: among theſe, as the plant draws to maturity, riſes the ſtalk, which is ſometimes three feet high, round and much branched. The leaves on it are of a much ſmaller ſize than thoſe from the root. The flowers, which are each compoſed of four leaves, are very numerous, ſmall, and white, with ſome ſpots of red; theſe are ſucceeded by rather large, light, pointed ſeed-veſſels, incloſing reddiſh brown ſeeds of an oval ſhape, and about as large again as a rape ſeed.

The juice of the freſh roots mixed with white wine, is reputed an excellent remedy againſt the gravel, ſcarce any thing operating more ſpeedily and powerfully by urine, or is more ſucceſsful in aſſiſting the diſcharge of ſmall ſtones. But in the way theſe roots are commonly eaten they are windy and unwholeſome.

Horſe Radiſh.

THIS plant is as well known in our gardens as the former, and grows wild alſo, in ſome places near rivers and other waters. The root is very long, and of an hot, biting taſte, and pungent volatile ſmell, ſo that it affects the eyes of thoſe who ſcrape it; and brings on ſneezing. The leaves are two feet in length, and half a foot in breadth; they are of a deep green colour, obtuſe at the points, and in ſome lightly indented at the edges, in others deeply cut and divided. The ſtalks riſe to the height of three feet, bearing very ſmall and narrow leaves, and at the top ſtand long ſpikes of ſmall white flowers; theſe are ſucceeded by little ſeed-veſſels, but the plant does not conſtantly flower, and when it does, the ſeeds ſcarcely ever arrive at perfection. It is propagated by the root, the ſmalleſt portion or even fibre of which will become a plant.

The juice of the root of *horſe radiſh* is a very powerful diuretic, and is preſcribed for the jaundice and dropſy. Whole or ſliced, it is put into diet drinks to ſweeten the blood; and eaten frequently, and in quantities, with meat, it is a good remedy for the rheumatiſm. The root ſcraped is uſed in ſinapiſms and hot poultices to the feet in many diſorders.

Ragwort.

THIS plant is very common on banks, and in dry paſtures, and is diſtinguiſhed by the ragged leaves which give it name, and cluſters of yellow flowers. It grows about two feet high. The ſtalk is ſtout, round, channelled, and frequently of a purpliſh colour. The leaves are divided into ſeveral parts, in ſuch a manner as to look torn or ragged. They are of a dark dull green colour; are joined to the ſtem without any foot-ſtalk, and are broad and round at the extremities. The flowers, which are of moderate bigneſs and a yellow colour, grow at the tops of the branches in cluſters of great ſize; they paſs off in a downy, flat, aſh-coloured ſeed. The whole plant has an offenſive ſmell. The root is ſpreading, and full of long white fibres.

Thoſe leaves which riſe immediately from the root are uſed medicinally, being not only larger but more juicy than thoſe on the ſtalks. They are applied outwardly as a remedy for pains in the joints, and the ſciatica, or hip-gout. They are alſo uſed in ointments, or fomentations, to old ſores and foul ulcers, and are ſaid to poſſeſs cleanſing and healing qualities.

The Raſberry Buſh.

THIS ſhrub is in every garden, and grows wild alſo in ſome parts of England. The ſtalks are round, ſtraight, brittle, of a pale brown colour, and prickly. The leaves are divided into five parts on one foot-ſtalk; they are of a pale green, full of high veins, indented about the edges, and hairy. The flowers are ſmall, conſiſt each of five leaves, and are of a whitiſh colour, with many threads in the middle. The fruit is compoſed of ſeveral grains: it is ſoft to the touch, and of a delicate taſte and delightful ſmell. Theſe berries are of two ſorts, red and white.

The juice of the ripe fruit boiled to a ſyrup, is pleaſant, agreeable, and wholeſome to the ſtomach, corrects ſickneſſes, and ſtops vomiting.

The common Reed.

THIS plant grows by the ſides of rivers, and in watery places. The roots are thick, knotty, and jointed, the ſtalks are round, hard, jointed, and five or ſix feet high. The leaves are long, hard, rough, and narrow, like thoſe of graſs; of a light green colour, and much ribbed. The flowers, which are brown and chaffy, ſtand in huſky ſpikes on the tops of the ſtalks, which are bent down by the weight. No ſeeds are diſcoverable.

This plant is not often uſed in medicine, though the juice of the freſh roots is ſaid to promote the periodical diſcharges effectually, but not violently. It operates by urine; and is a good remedy for ſtranguries, gravel, and heat of urine.

Prickly Reſtharrow.

THIS little plant is common in waſte-grounds, and by road ſides. It grows about a foot high. The ſtalks are round, reddiſh, ſmooth, and tender whilſt they are young; but afterwards tough, in a manner woody, and full of ſharp thorns. The leaves are very numerous, and ſtand three on every foot-ſtalk, or one leaf is rather divided into three parts like trefoil; the leaves grow pretty cloſe to the ſtalk, and are of a duſky green, and finely indented about the edges. The flowers, which are ſmall and purple, reſembling in ſhape thoſe of a pea, but more flat, ſtand among the leaves towards the upper parts of the ſtalks; each flower is followed by a ſmall pod, containing two or three kidney-ſhaped ſeeds. The root is tough, woody, and white.

The bark of the root is uſed medicinally; to obtain which, the root is to be taken up freſh, and the bark being ſeparated, is to be boiled in water. The decoction given in large quantities, is ſaid to be a good remedy in the gravel, and all obſtructions of urine; it is of courſe alſo recommended in the dropſy and jaundice. Vinegar being added to this decoction, the mouth may be gargled with it as a preſervative of the teeth.

Rhapontic.

THIS ſtout plant is a native of Scythia, but is kept in many gardens of Great-Britain. It grows to the height of four feet. The ſtalk is round, channelled, about an inch in diameter, ſometimes hollow, and generally upright. The leaves are large and broad: thoſe which ſpring immediately from the root, being a foot or a foot and a half long, and from nine to twelve inches broad; theſe are of a dark green colour, with large ribs, and round but pointed at the ends. The flowers, each of which conſiſt of ſix leaves, are ſmall and white; they ſtand in large cluſters at the tops of the ſtalks, and are ſucceeded by large, ſhining, triangular, brown ſeeds. The root is large, and thick at the head, but divides into many branches: is of a dark brown colour on the outſide, but of a deep yellow within, and a bitteriſh taſte, and this is the part uſed in medicine. If this root is carefully preſerved, it ſomewhat reſembles rhubarb, and is of the ſame nature, but leſs purgative, and more aſtringent; and, on this account, it might anſwer better in many caſes, if it could be had genuine; but what is procured at the druggiſts cannot always be depended upon, as many roots may be ſubſtituted, which will impoſe on thoſe who are not perfectly well acquainted with it.

Garden Rocket.

THIS plant is only found in our gardens; it grows two or three feet high, and very ſtraight. The ſtalk is round, and of a dark green; the leaves, which are of an oblong form, ſomewhat reſembling thoſe of muſtard, are broad, of a dark green colour, and deeply divided at the edges. The flowers are of moderate ſize, and of a whitiſh colour, with purple veins, and ſtand in long ſpikes at the tops of the ſtalks. They are ſucceeded by long and ſlender ſmooth ſeed-veſſels, divided into two parts by a thin membrane, which ſeparates when the ſeed is ripe; and this is round, ſmall, of a reddiſh colour, and pungent taſte. This herb is ſometimes eaten as a ſallad herb, but it is not very agreeable; it operates by urine, and is ſaid to be a remedy for the ſcurvy. A ſtrong infuſion of the leaves may be made, and then boiled to a ſyrup; and this is recommended to alleviate coughs, to cauſe expectoration, and eaſe the lungs.

The Dog Roſe, or Wild Roſe.

THIS buſh grows in every hedge. The ſtalks or ſtems are round, woody, and very thickly armed with prickles. The leaves are compoſed each of ſeveral ſmaller, ſtanding in pairs on a common rib, with an odd leaf at the end; they are ſmall, of an oblong ſhape, of a lively ſhining green colour, and indented with beautiful regularity at the edges. The flowers, which are ſingle, large, and elegant, are white, with a faint bluſh of red. Theſe are ſucceeded by a fruit, which is the common hip; it is red, oblong, and contains a great quantity of hairy ſeeds in a fine acid pulp.

This fruit is the only part uſed medicinally; the pulp being ſeparated from the ſkins and ſeeds, is made into a conſerve with ſugar, and becomes a pleaſant medicine, and is of conſiderable efficacy in removing coughs. It is alſo uſeful and agreeable to quench violent thirſt in fevers; it is alſo good for all complaints of the breaſt, and is eſteemed an antiſcorbutic.

Nor are other parts of this plant deficient in virtues, if they were tried; the buds gathered before they are open, and dried, would be found an excellent aſtringent, and much more powerful than the red roſes, which are commonly dried for this purpoſe. A ſtrong infuſion of theſe dried buds, and the powder of others, adminiſtered twice a day, is an efficacious medicine to reſtrain overflowings of the monthly diſcharges, ſeldom failing to effect a cure. The ſeeds being ſeparated from the pulp, dried and powdered, operate by urine, and are preſcribed againſt the gravel, but they are not very powerful.

There is ſtill another medicinal production of the *Dog-Roſe Trees*, and this is a kind of ſpungy fibrous tuft, of a green or reddiſh colour, which is found on the branches of this ſhrub, and is called bedeguar. Many of theſe are ſometimes ſeen on the ſame tree, and they are cauſed by wounds made by inſects in the ſtalks, as the galls are produced upon the oak. Theſe tufts or excreſcences are aſtringent, and given in powder are ſaid to ſtop fluxes.

The Damaſk Roſe.

THIS ſhrub, which is only found in our gardens, very much reſembles that laſt deſcribed. It grows four or five feet high, according to the ſituation; but the ſtalks are not ſo ſtrong, nor does the plant grow ſo erect as the other. The ſtem and branches are armed with ſharp prickles; the leaves, which are each compoſed of two or three pairs of ſmaller ones, with an odd one at the end, are whitiſh, hairy, broad, and finely indented at the edges. The flowers are large, and of a very beautiful pale red colour, full of leaves, and of an admirable pleaſant ſmell. They are ſucceeded by fruit, like the common hip.

The flowers are gently purgative, they are commonly made into a ſyrup, by pouring upon a quantity of them, freſh gathered and plucked from their cups, boiling water enough to cover them; after ſtanding twenty-four hours, the liquor may be preſſed off, and twice the quantity of ſugar added. It is eſteemed an exceeding good purge for children; and grown people, who are ſubject to be coſtive, may take a little of it every night, and it will keep the body open continually, without producing the diſagreeable effect of binding afterwards, as is the caſe with medicines which purge ſtrongly. The fineſt roſe-water is diſtilled from *damaſk roſes*.

The White Roſe.

THIS roſe-tree grows taller than any other, and is found riſing ſometimes to the height of ten or twelve feet; but the ſtem of this is alſo feeble, ſo that it can hardly ſupport itſelf upright, and the branches are ſlender and weak. The ſtalk is round, prickly, and much branched; the leaves are of a dark green, and, like all the other roſes, compoſed of ſeveral pairs of ſmaller, with an odd one at the end. The flowers are rather ſmaller than thoſe of the damaſk roſe, but of the ſame form; they are perfectly white, and are leſs odoriferous than the damaſk roſe.

The flowers of this plant alſo are only uſed, but theſe muſt be gathered in the bud, and may be uſed freſh or dry; a ſtrong infuſion of them is ſaid to be effectual in reſtraining overflowings of the female periodical diſcharges, and the bleeding of the piles; and the diſtilled water is preferred to that of the other ſorts for eye-waters.

The Red Roſe.

THIS ſhrub is alſo common in gardens, and is the ſmalleſt and loweſt of the ſeveral kinds of roſes. The ſtalks are round, woody, and feeble, but they are leſs prickly than thoſe of the other ſorts. The leaves are large, but are of the ſame figure as the others, being compoſed each of three or four pair of ſmaller ones, of an oval form, and of a duſky green colour; they are alſo beautifully indented round the edges. The flowers are nearly of the ſhape and ſize of thoſe of the damaſk roſe, but not ſo double; and theſe roſes have a quantity of yellow threads in the middle. They are of a fine deep red colour, and they are leſs fragrant than any roſe. The flowers are ſucceeded by the ſame kind of fruit with all the others.

The flowers are in much uſe in medicine; they muſt be gathered in bud, and cut from the huſks, ſo as to take none of the white bottoms; theſe buds being dried, make the conſerve of red roſes. The flowers have moſt virtue when dried; they are given in infuſion or in powder, and are ſaid to be efficacious in reſtraining overflowings of the monthly diſcharges, and all other internal hæmorrhages. A tincture is alſo made of theſe roſes, which ſtrengthens the ſtomach, ſtops vomitings, is of ſervice in conſumptions, and a powerful as well as agreeable remedy in fluxes of every kind.

Roſemary.

THIS ſhrub is not a native of Great-Britain, though it is found in every garden; it grows wild in Spain, France, and Italy, and even in this country riſes to the height of ſix or ſeven feet, but is weak, and does not ſupport itſelf in an upright form. The trunk is covered with a rough brown bark; the leaves, which ſtand very thick in brittle and ſlender branches, are narrow, about an inch long, and rather thick; they are of a deep green on the upper ſurface, and hoary or ſilvery underneath. The flowers ſtand among the leaves on all parts of the branches, but moſtly towards the tops; they are large and beautiful, of a pale purple colour, and of a very agreeable ſmell. The whole plant makes a very beautiful appearance when it is in full flower.

The tops of *roſemary*, when they are in flower, are thought to contain it's greateſt virtue; and being uſed as tea for a conſiderable length of time, they are excellent againſt violent head-aches, convulſions, tremblings, and all other nervous complaints. A conſerve may be alſo made of them, which will anſwer the ſame purpoſes; but it ſhould not be compoſed of the picked flowers only, the flowers and tops of the branches together have more virtue. Theſe flowery tops of *roſemary* are the principal ingredients in Hungary water, which is made by putting two pound of theſe into a common ſtill with two gallons of melaſſes ſpirits; and this may be diſtilled to one gallon and a pint.

Roſa ſolis, or Sun-Dew.

THIS little plant grows commonly in boggy grounds, and on heaths. It does not grow above ſix or ſeven inches high. The leaves, which all ſpring immediately from the root, are roundiſh and hollow; are about the ſize of a finger-nail, and ſtand on foot-ſtalks of an inch long; theſe foot-ſtalks are covered and fringed in a very curious manner, with ſhort red hairs or briſtles, and in the hotteſt ſeaſon of the year each leaf hath a drop of clear liquid ſtanding on it. The ſtalks are ſlender and without leaves, and at their tops ſtand little white five-leaved flowers, which are ſucceeded by ſmall ſeed-veſſels of an oblong form, containing a great number of very ſmall ſeeds. The root is fibrous and ſmall. It flowers in June and July.

The roots, ſtalks, and flowers, may be uſed freſh-gathered; they are eſteemed efficacious in the cure of convulſions and tremblings of the limbs, and the whole tribe of nervous and hypochondriac complaints; but this plant is not at preſent in any high degree of reputation.

Rhubarb.

THIS plant, though a native of different parts of the eaſt, is at preſent well known in our gardens. It ſometimes reaches to three feet in height. The ſtalk is round, large, channelled, and of a greeniſh colour, but ſometimes ſtained with purple. The leaves are large, and of a form rather triangular; they are broad at the baſe, narrow at the points, and indented or waved along the edges. They ſtand on thick hollow foot-ſtalks, which have alſo frequently a reddiſh caſt. The flowers, which are whitiſh, ſmall, and little obſerved, ſtand at the tops of the ſtalks in the ſame manner as the flowers of the *dock*, which they ſomewhat reſemble. The ſeed is of a triangular ſhape. The root is perfectly well known; it is large, long, and generally divided towards the bottom: when it is cut it is of a yellow colour, and appears veined with dark purple; but theſe veins are more diſcoverable in the dry than in the freſh root; it is not altogether unlike the appearance of a cut nutmeg, but of a lighter colour.

The virtues of the root are univerſally known; it is a gentle purge, but acts as an aſtringent after it's purgative operation. It ſtrengthens the ſtomach and bowels, reſtrains vomitings, and removes the cauſe of colics. It is equally beneficial in the jaundice, and rhubarb and nutmeg, in equal portions, dried together before the fire, compoſe an admirable remedy againſt purgings: but it is in vain to attempt an enumeration of the virtues of this root, ſcarce any chronic diſeaſe can be mentioned in which it is not ſerviceable; in all thoſe which affect the ſtomach and bowels, it is not to be equalled.

Rue.

THIS little ſhrub is found in moſt gardens, where it grows to the height of three or four feet. The ſtem is ſtrong, woody, tough, and covered with a bark of a whitiſh colour. The branches are numerous, and the young ſhoots are round, green, and ſmooth; but as they grow older they aſſume the appearance of the ſtem. The leaves are compoſed of many ſmall oval obtuſe diviſions; they are of a bluiſh green colour, ſmooth, and of a fleſhy ſubſtance. The flowers, each of which is compoſed of four hollow leaves, are yellow, and though not large, are very conſpicuous;

they have eight threads in the centre, which ſurround a green head, appearing to be cut or divided into four parts, each full of holes, and containing ſmall, black, rough ſeeds. The root is woody and fibrous.

Rue ſhould be uſed freſh gathered, the tops of the young ſhoots containing moſt virtue. They may be given in infuſion, or made into a conſerve with ſugar, and taken in that form. The infuſion is recommended as a very good medicine in fevers, raiſing the ſpirits; and promoting perſpiration, but it is too hot for the modern practice to anſwer this purpoſe, as it drives out eruptions too violently. It is alſo preſcribed in head-aches, nervous diſorders, convulſions, and hyſterics. The conſerve is recommended for weakneſſes of the ſtomach, and pains in the bowels; and is ſaid to expel poiſon, and cure the bites of mad animals and venomous reptiles. It is not diſagreeable, and may be taken frequently by perſons ſubject to the diſorders above mentioned, with great advantage.

Rupture Wort.

THIS is a ſmall and low plant, which grows wild in ſome parts of the kingdom, but is more commonly found in the gardens of the curious. It ſeldom grows above three or four inches long, and the ſtalks lie on the ground; and many growing from the ſame root, they ſpread into a kind of circular form. They are ſlight, jointed, and of a light green colour. The leaves, which are extremely ſmall, are nearly of an oval figure, and ſtand in pairs at the joints; theſe are alſo the ſame light green. The root is long, but not large.

The juice of the leaves and ſtems of this plant freſh gathered, has been much celebrated as an external application for ruptures: from this opinion, which has been perhaps formed without any great foundation, it has received it's name. An infuſion of it taken inwardly, operates by urine, and is ſaid to relieve in the gravel and jaundice.

Saffron.

THIS plant, which is of the ſame kind with the flowers which are called crocuſes in the gardens, is cultivated in fields in ſome parts of England, and particularly in Eſſex and Cambridgeſhire, and produces a very conſiderable profit. The flowers appear in autumn, but the leaves are not viſible till ſome time after the flowers are fallen; theſe flowers riſe immediately from the root, and have indeed no ſtalk. The root is round, bulbous, and about the ſize of a large nutmeg, with many white fibres at it's flat bottom. The flowers are incloſed in a thin ſkin or huſk, and are compoſed of ſix long but round-pointed purple leaves. In the centre of theſe, ſtand three threads with yellow tops, but theſe are uſeleſs: between them, however, riſes up what is called the piſtil of the flower, which at it's top ſeparates into three long threads of an orange or fiery red colour, and theſe are the true *ſaffron*. They are carefully taken out of the flower and preſſed into cakes, after having undergone a particular proceſs, in which cakes it is ſold under the name of Engliſh ſaffron, which is eſteemed the beſt in the world. The leaves, which follow the flowers, are long and graſſy, of a deep green colour, and very narrow.

Saffron is a noble cordial, ſtrengthening the heart and vital ſpirits, and reſiſting putrefaction; it was formerly given in all eruptive diſorders to drive out the puſtules, but that has been long thought unneceſſary; it removes obſtructions of the liver and ſpleen, and cures the jaundice; it is helpful in conſumptive caſes, aſthma, and difficulty of breathing; externally applied it moderates pain, and ripens abſceſſes and tumours.

Baſtard Saffron.

THIS plant does not bear the ſmalleſt reſemblance to that laſt deſcribed in any other reſpect than in the yellow threads which grow from the flower. It is of the thiſtle kind, and riſes two feet or two feet and a half high, growing very upright. The ſtalk is round, angular, and branched; but is without prickles. The leaves are of an oblong ſhape, about two inches long, and one broad, pointed and prickly about the edges. The flowers, which ſtand at the tops of the branches, conſiſt of round, ſcaly, and prickly heads, with yellow thready flowers growing from among them: theſe flowers reſemble the heads of thiſtles, but are narrower and longer, and are ſucceeded by white angular longiſh ſeeds, growing narrow at one end.

The flowers are employed in dying in ſome parts of Europe. The ſeed only is uſed medicinally, and is recommended in the rheumatiſm and jaundice; it is taken in infuſion, which operates both by vomit and ſtool, but not very violently; it carries off tough phlegm, clears the lungs, and is ſaid to aſſiſt the pthiſic.

Red Sage.

THIS is the common garden *ſage*. It is a ſhrubby plant, and grows a foot or two high, and is full of branches. The ſtem is hard, woody, tough, and covered with a brown rough bark. The leaves are of an oblong form, rough, and wrinkled; they ſtand on long foot-ſtalks, and are ſometimes of a hoary green, and ſometimes of a reddiſh purple colour. The flowers grow on long ſtalks, which riſe only at a particular ſeaſon of the year, and ſtand above the reſt of the plant; they are large and blue, ſet in large clammy cups, and are of the figure of the dead-nettle flowers, but more open. The whole plant has a very agreeable ſmell.

The leaves and tops are uſed medicinally, and are beſt freſh; the uſual way of taking them is in infuſion or tea, and this ſeems to be better than any other. This herb is cordial, and good for moſt diſeaſes of the head and nerves, palſy, convulſions, and tremblings; it alſo promotes perſpiration. A ſtrong decoction, or the juice of the freſh leaves, acts diuretically, and removes obſtructions. Sage tea is a common drink in fevers, but ſhould not be given in conſiderable quantities in the ſmall-pox and other eruptive diſorders, where it is not adviſeable to load the ſkin with puſtules, as it aſſiſts in throwing out eruptions.

Sage of Virtue.

THIS plant reſembles the former in it's manner of growth, but is ſmaller and without the red colour. It riſes a foot or two high, and is very thick. The ſtem is woody, and the branches numerous. The leaves are of an oblong ſhape, narrower than the *common ſage*, and of a hoary green colour: there is often a pair of ſmall leaves or ears at the baſe of each of the larger. The flowers are the ſame as thoſe of the *red ſage*, but ſmaller. The whole plant has a ſmell equally agreeable with the other.

Of this plant the green tops are uſed generally, and they poſſeſs nearly the ſame virtues as that laſt deſcribed, but not ſo powerfully. It was formerly conceived that this was leſs heating than the garden ſage, for which reaſon it was preferred to it, but this opinion ſeems to have been ill-founded.

Wood Sage.

THIS plant grows wild in hedges and woody places in many parts of England; it's leaves are like thoſe of *ſage*, and like thoſe plants it has long ſpikes of ſmall flowers. It grows two feet or two feet and a half high. It has many ſquare firm woody and hairy branches. The leaves ſtand in pairs at the joints; they are rather ſhorter and broader than thoſe of *ſage*, like which they are rough and wrinkled, but of a greener colour, and indented about the edges. The flowers are numerous, and of a greeniſh yellow colour, with ſome purple threads in them. The plant has a peculiar ſmell, which is not diſagreeable, though it has ſomething of the garlic flavour, but not ſtrong enough to be offenſive. It flowers in July.

The freſh tops and leaves are uſed medicinally; an infuſion made of them promotes urine, and the monthly diſcharges. The juice of the leaves, drank for a length of time, is eſteemed a remedy for gouty and rheumatic pains, and for the ſcurvy and dropſy. It has alſo been reputed a vulnerary plant, and uſeful to prevent gangrenes and mortifications.

Samphire.

THIS plant grows in immenſe quantities on the rocks and clifts of the ſea in many parts of England, and has been commonly called *ſea fennel*, to which plant it however ſcarce bears the ſmalleſt reſemblance. It has, indeed, many ſmall and long leaves, but they are much larger than thoſe of fennel, irregular, obtuſe at the points, and thick and fleſhy. The ſtalk is round, hollow, channelled, and much branched. The flowers are ſmall and yellow, and ſtand at the tops of the ſtalks in great cluſters, and are ſucceeded by round ſeeds larger than thoſe of fennel. The whole plant has an agreeable aromatic taſte, and a freſh pleaſant ſmell. The root is thick, long, and enduring.

The leaves and young branches, without any of the hard or larger ſtalks, are pickled and brought to our tables; but they are not often brought genuine to London, other things being ſubſtituted and pickled in their place. The juice of the freſh leaves is a very powerful diuretic, and is ſerviceable in the gravel, ſtone, and jaundice; it alſo helps to remove ſuppreſſions of the periodical diſcharges.

Sanicle.

THIS plant is commonly found wild in woods in many parts of England. It grows to the height of a foot or eighteen inches. It has a ſmall fibrous root, from which riſe immediately great numbers of leaves, ſtanding on long foot-ſtalks, and making a conſpicuous appearance; they are of a round ſhape, but deeply cut ſo as to appear five-cornered; they are indented about the edges, of a very dark green colour, ſmooth and ſhining. The ſtalk is channelled, upright, and without leaves. On the ſummit grows a ſmall round tuft of little white flowers; each of theſe is ſucceeded by two little rough ſeeds. It flowers in May.

The leaves are chiefly uſed in medicine. A ſtrong decoction of them is recommended to reſtrain the overflowings of the monthly diſcharges, and the bleeding of the piles. It has been formerly preſcribed for the cure of ruptures, but ineffectually. This is one of the old vulnerary plants.

The Saſſafras Tree.

THOUGH this elegant tree is a native of America, yet it may be met with in ſome gardens in Great Britain. In it's natural ſtate it grows thirty or forty feet high. The trunk is free from branches till it comes near the top; the branches grow near together, and ſpread handſomely. The leaves are of two kinds; thoſe on the lower parts of the twigs are oval, but pointed, and ſomewhat reſemble bay leaves; thoſe towards the extremities of the branches are larger, broader, and divided into three parts, like the leaves of maple, or the ſmaller leaves of the fig-tree. The flowers, which are ſmall and yellow, grow in cluſters, and are ſucceeded by ſmall berries like bay berries. The wood is light, of a reddiſh colour, and agreeable ſcent. The root is large, and covered with a dark grey or iron-coloured bark.

The wood of the root only ſhould be uſed; but the ſtem is too often ſubſtituted. It is imported in logs, and cut into ſhavings, but is ſometimes ſtripped of it's bark, which contains the moſt virtue. It is uſually adminiſtered in infuſion as tea, in which way it is not diſagreeable, and is a conſtant ingredient in antiſcorbutic diet drinks. It promotes perſpiration, and is eſteemed a remedy for all foulneſſes of the blood, of which it is ſaid to be a great ſweetener.

Savine.

THIS ſhrub is found in our gardens, where it continues green all the winter. The trunk is covered with a brown or reddiſh bark; the branches, which are numerous, and ſtand irregularly, bear ſmall narrow leaves, of a dark green colour, and prickly. They are ſomewhat like thoſe of cypreſs, and emit a ſtrong ſmell. The flowers, which are very ſmall, moſſy, and of a greeniſh yellow colour, are ſucceeded by ſmall berries, which are black when they are ripe, and covered with a bluiſh duſt, like the bloom of a plum; but theſe berries ſeldom come to perfection.

The tops of the young branches have been formerly uſed medicinally, and were commonly given in tea; but they ſo very powerfully promote the periodical diſcharges, as to be very dangerous to women with child, frequently cauſing a miſcarriage, it is therefore very properly out of uſe. The common people give the juice with milk to children, to deſtroy worms. It operates by ſtool, and frequently brings worms away with it; but it is a very rough medicine, and not fit for children of tender conſtitutions.

Summer Savory.

THIS plant grows in every kitchen-garden. It ſeldom exceeds ten inches or a foot in height. The ſtalks are numerous, hard, woody, brown towards the bottom, and green and tender towards the tops. The leaves, which are long and narrow, ſtand in pairs at the joints, and the baſes of them are full of young leaves. The flowers, which are white, with a little tinge of red, grow on the upper part of the ſtalks between the leaves; and each flower is ſucceeded by four ſmall dark brown ſeeds. It flowers in June, and the whole plant has a very agreeable ſmell, and grateful taſte.

The leaves and ſtems are medicinally uſed; an infuſion, drank by way of tea, is ſaid to relieve colic pains, expel wind from the ſtomach and bowels, aſſiſt ſhortneſs of breath, remove obſtructions, and promote the periodical evacuations.

Winter ſavory differs little from the above deſcribed, and has much the ſame virtues.

White Saxifrage.

THE roots of this very pretty plant conſiſt of ſeveral ſmall reddiſh round grains, connected by a few fibres. It is found in our meadows, and diſtinguiſhed by the regularity of it's leaves, and it's white ſnowy flowers. It riſes to the height of ten inches. The ſtalk is round, large, ſtrong, erect, and ſomewhat hairy. The leaves, which are of a light green colour, are thick, and of a fleſhy ſubſtance; of a round ſhape, and indented round the edges. They ſtand upon long foot-ſtalks. The flowers are large and white, and grow in great numbers on the tops of the ſtalks; and are ſucceeded by two horned roundiſh ſeed-veſſels, containing many very ſmall ſeeds.

The whole plant has been formerly uſed, and the ſmall parts of which the root is compoſed, have been called, by ignorant people, ſaxifrage-ſeed. However, theſe are the parts principally recommended, and a decoction of them is diuretic, and uſeful in the ſtone and gravel. They are beſt freſh.

Meadow Saxifrage.

THIS plant grows wild alſo in meadows and paſture-grounds, but though known by the ſame Engliſh name as that laſt mentioned, is very different from it in form and flower. It riſes upwards of two feet high. The ſtalks are round, deeply channelled, of a dark green colour, and very much branched. The leaves, which are large, are divided into a number of fine narrow parts. The flowers, which ſtand at the tops of the ſtalks in little tufts, or round cluſters, are ſmall, and of a pale yellow. They are ſucceeded by ſmall channelled reddiſh brown ſeeds. The root is about the thickneſs of a finger, of a brown colour without, white within, and of an aromatic and pungent taſte and ſmell. It flowers in Auguſt.

The root is uſed medicinally, and is beſt freſh taken up. It may be adminiſtered in a ſtrong infuſion, and operates powerfully as a diuretic in bringing off gravel. It alſo relieves colic pains occaſioned by the ſame cauſe.

Scabious.

THIS is a well-known wild plant, in corn-fields and meadows. It grows about three feet high. The leaves ſpring chiefly from the root, and are ſpread upon the ground. They are of an oblong ſhape, divided without regularity at the edges, and of a pale green colour, hairy, and ſomewhat rough to the touch. The ſtalks, which are round, erect, hairy, and of the ſame light-green colour, have but few leaves on them, and theſe are placed two at each joint, and are more deeply divided than thoſe on the ground. The flowers ſtand at the extremity of the branches, and are of a deep blue colour, and each is compoſed of a number of ſmaller hollow parts collected into a head. The root is long and brown.

Thoſe leaves, which ſpring immediately from the root, and are gathered before the ſtalks appear, are beſt for medicinal uſe. A ſtrong infuſion of them freſh, is preſcribed as a remedy for aſthmas and difficulty of breathing; and the ſame infuſion made into a ſyrup, is recommended for coughs. An infuſion of the flowers is alſo ſaid to be cordial, to promote perſpiration, and carry off fevers; but this is ſomewhat doubtful, the juice, however, is applied externally, to remove foulneſſes and eruptions of the ſkin.

Garden Scurvy Graſs.

THIS plant grows wild about the ſea-coaſts in the north of England, and is kept alſo in gardens. It riſes a foot high. The ſtalks are round, feeble and green. The leaves, which riſe from the root, ſtand in large tufts, on long foot-ſtalks, and are of a round form, and a lively green colour, tender, full of juice, and appearing hollow, ſo as ſomewhat to reſemble a ſpoon. The ſtalks bear but few leaves, and they are more angular and pointed than thoſe which riſe from the root. The flowers, which ſtand at the tops of the ſtalks, grow in ſmall cluſters, and conſiſt of four white ſmall and bright leaves; they are ſucceeded by ſmall, round, ſpreading ſeed-veſſels, containing little round ſeeds; the leaves and flowers have a hot acrid taſte. The root is long and fibrous.

The leaves and ſtalks are uſed freſh; and an infuſion, or the expreſſed juice of them, is an excellent remedy for the ſcurvy, and all other foulneſſes of the blood, cleanſing the ſkin from pimples, ſcabs, and eruptions. If the juice is taken, it may be rendered pleaſant by mixing with it orange or lemon juice and ſugar, and in this way it ſhould be adminiſtered every day for ſix weeks or two months in the ſpring of the year, to thoſe who have ſcorbutic habits.

Sea Scurvy Graſs.

THIS plant alſo grows wild about our ſea-coaſts, and in ſalt marſhes, over which the tide flows. The leaves, though leſs numerous than thoſe of the other, are rather thicker and larger, of an oblong ſhape, and a reddiſh green colour, pointed at the ends, and ſometimes irregularly indented at the edges. The ſtalks, whioh hardly riſe ſo high as thoſe of the garden ſort, are tender, round, and channelled, and, like the other, have only a few leaves on them. The flowers, as well as the ſeeds, in all reſpects reſemble the other, and like them are pungent and acid to the taſte. The leaves are uſed medicinally freſh-gathered, and may be taken either in the juice or an infuſion. The virtues of this plant are the ſame as thoſe of the other, but ſome are of opinion that it is not equal in efficacy, and the taſte is certainly leſs agreeable.

Self-Heal.

THIS plant grows every where in meadows and paſture-grounds, and way-ſides. It has a ſlender fibrous creeping root, and ſeldom grows above ſix inches high. The ſtalk is angular, and ſomewhat hairy, and has a few leaves, which ſtand in pairs upon it, but theſe ſeldom amount to more than two or three pair: a much larger quantity however ſpring immediately from the root; they are of an oblong form, broad in the middle, and narrower at the baſes and extremities, and not at all indented round the edges. The flowers, which are ſmall, ſtand in a kind of ſhort ſpikes or heads at the tops of the branches, and the cups which contain them are purpliſh; each flower is ſucceeded by four longiſh brown ſeeds in the bottom of the cup. A ſtrong decoction of the leaves of this plant is aſtringent, reſtrains purgings, accompanied with acrid or bloody ſtools, and ſtops the overflowings of the monthly diſcharges. The juice may alſo be taken for the ſame purpoſes, and is perhaps more efficacious. The dried herb may be made into an infuſion, and ſweetened with honey as a gargle for a ſore throat or ulcerated mouth. The juice, or an ointment made from it, has been eſteemed a good dreſſing for old ulcers and ſores.

Baſtard Sena.

THIS ſhrub is a native of Italy, but kept for ornament in the gardens of Great-Britain. The trunk is not very ſtout, but particularly erect, and as well as the branches, which are numerous and ſlender, is covered with a whitiſh rough bark. The leaves conſiſt each of ſeveral pairs of ſmaller, ſet on a common rib; having, as uſual with leaves of this deſcription, an odd leaf at the end. The flowers, which grow in bunches at the extremities of the ſhoots, are ſmall and yellow, and the tufts hang down; they are ſucceeded by large thin bladders of a greeniſh colour, flattiſh on the upper part, and boat-ſhaped beneath, crooked at the ends, and full of kidney-ſhaped black ſeeds. It flowers in July.

The leaves are ſometimes uſed medicinally, and an infuſion of them given as a purge, but it is a very violent one, and apt to work both upwards and downwards. It is therefore only fit for very hardy conſtitutions; ſuch as can bear them may find relief from them againſt rheumatic pains.

The right Service Tree.

THIS tree grows wild in ſome parts of this kingdom, particularly in ſome of the weſtern counties, and in Staffordſhire, but is hardly known in others, even in the gardens; it is of moderate ſize, ſeldom much more than twenty feet high, and the branches ſpread much, but very irregularly. The leaves, which are what are commonly called winged, being compoſed of ſeveral pairs of ſmaller, ſet on a common rib, with an odd one at the end, are long, narrow, and indented, reſembling in ſome meaſure thoſe of the aſh tree. It bears cluſters of ſmall five-leaved white flowers, each of which is ſucceeded by a fruit of the ſhape and ſize of a very ſmall pear; and theſe fruits grow together in cluſters like the flowers, each of them having foot-ſtalks an inch long. The fruit is green, except when it has been expoſed to the ſun, where it generally turns reddiſh. The taſte, whilſt it is green, is harſh and auſtere, but very pleaſant when it is ripe.

The unripe fruit is given as an aſtringent, and uſed to ſtop fluxes, for which purpoſe the juice is preſſed out, and boiled to a ſyrup with ſugar; but it is ſeldom to be met with, and the following ſort is generally ſubſtituted.

The common Service Tree.

THIS is a much larger tree than the other, and very beautiful, being of regular growth, and the leaves differing from thoſe of the former, and reſembling thoſe of the *maple*, being of an elegant ſhape. The bark of the trunk is whitiſh and rough, but tolerably ſmooth on the branches, where it is of a deeper colour. The leaves are not winged but large, of a roundiſh figure, and deeply divided into many parts, and generally indented round the edges: they are of a light green on the upper ſurface, and hoary or whitiſh underneath. The flowers, which are ſmall and of a yellowiſh white, grow in cluſters. The fruit, which grows in bunches, is about the ſize of a ſmall hazel nut, and of a brown colour when ripe.

The unripe fruit of this *ſervice* is alſo recommended to ſtop purgings, but recourſe can only be had to it in the particular ſeaſon when it is in this ſtate, as there is no method of preſerving the virtue in it throughout the year.

Shepherd's Purſe.

FEW wild plants are more common than this, which over-runs every garden and court-yard, wall, hedge, and heap of rubbiſh. The leaves are ſpread flat on the ground, in a round form, they are three or four inches long, but not very broad, and generally deeply indented at the edges, but in this there is conſiderable variation. The ſtalks, which are round and ſlender, but erect, grow about eight or ten inches high, and have only a few ſharp-pointed leaves, without foot-ſtalks on them. The flowers, which are white, ſmall, and compoſed each of four little leaves, ſtand at the tops in ſmall cluſters; below there is commonly a kind of ſpike of the ſeed-veſſels, three of which ſucceed each flower, and are ſhort, broad, and of the figure of a bag or purſe, containing a number of very ſmall reddiſh ſeeds. The root is white, fibrous, and almoſt taſteleſs.

Shepherd's purſe is recommended as cooling and aſtringent, and is ſaid to be good againſt ſuch purgings as are attended with ſharp and bloody ſtools. It is alſo preſcribed to reſtrain the bleeding of the piles, the overflowings of the periodical diſcharges, and other internal hæmorrhages. It may be given in infuſion, or the expreſſed juice; in the former way it has been eſteemed uſeful in fevers.

Skirret.

THIS plant is kept in our kitchen gardens, the roots being commonly brought to table. It grows to the height of three or four feet. The ſtalk is round, hollow, channelled, and pretty much branched. The leaves are winged, and each compoſed of three or five ſmaller, the pair or pairs being ſet oppoſite to each other, and one larger at the end; theſe ſmall leaves are oblong, indented at the edges, and ſharp-pointed. The flowers are of a greeniſh white and ſmall, they ſtand in round cluſters at the extremities of the branches. The root is of a peculiar form, being divided into ſeveral long parts like carrots, but of a white colour, they are agreeably taſted, and ſomewhat like parſnips.

A decoction of the roots is ſaid to be diuretic, and to relieve the pains of the gravel. Boiled in milk they are ſtrongly recommended as a reſtorative to perſons who have been reduced by long or violent illneſſes.

The Sloe Tree.

THIS ſhrub is univerſally known, being found in every hedge, and known by the name of the black thorn. It is actually a plum-tree, though of very inferior ſize, ſeldom growing above five or ſix feet high. The trunk and branches are covered with a black or purpliſh bark. The leaves are ſmall, nearly round, and of a pleaſant green, beautifully but lightly indented about the edges. The flowers, which appear early in the ſpring, even before the leaves, conſiſt each of five leaves, and are ſmall and white. The fruit is a plum of a very diminutive ſize, and auſtere taſte when unripe, but pleaſant when mellow.

The juice expreſſed from unripe ſloes is eſteemed a very good aſtringent, and is recommended for fluxes and internal hæmorrhages. It may be made into a ſyrup with ſugar, or boiled down to a conſiſtence, in which way it will keep the whole year; and is of a darkiſh colour on the outſide, but reddiſh and tranſparent within. It was formerly kept in the druggiſt's ſhops, under the name of German acacia, and it was ſubſtituted for that drug.

Smallage.

THIS is a wild plant, growing commonly about ditch-ſides, and in other watery places; the root is about the ſize of a finger, wrinkled and ſtriking deep into the ground, and from it ſpring many leaves, which are winged in the manner of celery leaves. The ſtalk is ſometimes two feet, or two feet and a half in height, and is round, ſmooth, channelled, ſomewhat angular, and branched. It bears ſome leaves like thoſe from the root, compoſed of many broad and indented parts, but thoſe are ſmaller. The flowers, which are ſmall, and of a faint yellow, ſtand in little cluſters at the diviſions of the branches. They are ſucceeded by ſmall and channelled ſeeds of a light colour, and biting or hot taſte.

The roots and leaves are uſed as diuretics; a ſtrong infuſion of them, freſh gathered, operating briſkly by urine, and in this way are eſteemed good againſt the gravel, ſtone, and ſtoppage of urine. The infuſion of this plant is alſo recommended to remove obſtructions, and aſſiſt in the cure of the jaundice or dropſy. The ſeeds dried expel wind, eaſe colic pains, and ſtrengthen the ſtomach. The whole plant is antiſcorbutic.

Sneeze-Wort, or Field Pellitory.

THIS pretty plant grows wild in wet meadows, and watery places. The root is woody, creeping, and fibrous. The ſtalk, which grows near two feet high, is firm, erect, and very little branched. The leaves, which are very numerous, ſtand without regularity, and are an inch or more in length, but very narrow, rough to the touch, of a lively green, and finely indented about the edges. The flowers ſtand in cluſters at the tops of the ſtalks. They are leſs than daiſies, which they a good deal reſemble, and are of a whitiſh colour. It flowers in July.

The leaves of *ſneeze-wort* are of a hot, biting taſte; dried and powdered, they may be taken by way of ſnuff, promote ſneezing, and are a remedy for the head-ach. The roots dried, are almoſt as hot as pellitory of Spain, like which they cure the tooth-ache; a piece held in the mouth drawing off the cold rheum, and bringing immediate relief.

Solomon's Seal.

THIS plant grows wild in woods and coppices in different parts of England; but is more common in gardens. It riſes a foot or eighteen inches high. The ſtalk is round, channelled, of a pale green colour, without leaves half way up, and from thence to the top cloathed with large oval ones, of a pale gloſſy green colour, blunt, ſmooth, ribbed, and not at all indented at the edges; and theſe leaves being ſet alternately on the ſtalks incline to one ſide, and bend the ſtalk that way. The flowers ſpring from the baſes of the leaves, and are ſmall and white, with pretty long foot-ſtalks. The flower is ſucceeded by a berry as big as a pea, at firſt green, but black when ripe. The root is white, oblong, about the ſize of a finger, marked with the ſeal like impreſſions from whence it takes it's name. It creeps upon or very near the ſurface of the ground, and is fibrous.

The root is uſed medicinally. It is dried and powdered; it is recommended to ſtop purgings with bloody ſtools, and other hæmorrhages. A conſerve made of the freſh roots with ſugar is eſteemed excellent againſt the whites, and the juice is ſaid to heal wounds, and aſſiſt ruptures; the leaves bruiſed, and applied as a poultice, are ſaid to remove black and blue ſpots occaſioned by blows or contuſions.

Sopewort.

THIS plant grows wild, but not very commonly, about rivers, and watery places, and is about a foot or eighteen inches high. The ſtalk is round, ſtrong, jointed, and of a light green; the knots are of conſiderable ſize, and the whole ſtalk is in a manner encompaſſed by the broad baſes of the leaves: theſe ſtand in pairs at each joint, and are of an oval form, and darker green colour, ſmooth, not indented at the edges, and having three large veins on the back of each. The flowers, which ſtand in cluſters at the tops of the branches, are of a pale purple colour, and moderate ſize; and theſe are ſucceeded by long and round ſeed-veſſels, containing many ſmall round ſeeds. The root is creeping, knobbed, and fibrous, and of an unpleaſant ſweetiſh taſte.

It was called *Sopewort* from the juice being uſed to get greaſy ſpots out of cloaths. The leaves and roots are uſed; the latter ſhould be freſh taken up; a decoction of either or both is ſaid to remove obſtructions, acting diuretically: it alſo promotes perſpiration, and is a ſweetener of the blood. It may be externally applied as a poultice, to ripen whitloes and other tumours.

Sorrel.

THIS plant grows every where in paſtures and meadows, and flowers in May or June. It riſes ſometimes a foot and a half high. The ſtalk is long, ſlender, channelled, upright, and a little branched. The leaves are of a dark green colour, broad, oblong, ſharp pointed, and having two ears at the baſe like ſpinage; they are not at all indented about the edges. The flowers grow at the tops of the ſtalks, in a long reddiſh ſpike like thoſe of docks, a ſmall kind of which it generally reſembles. The flowers are full of threads, and are ſucceeded by ſmall gloſſy triangular ſeeds, huſky. The root is about the ſize of a finger, of a yellowiſh brown colour, and fibrous. The whole plant is of an agreeable acid taſte. The leaves may be eaten as a ſallad, or the juice taken, and in either way ſorrel is an excellent antiſcorbutic. The ſeeds are aſtringent, and may be adminiſtered in powder to reſtrain fluxes. The root dried and powdered poſſeſſes alſo the ſame quality, and checks overflowings of the periodical diſcharges, and other internal bleedings.

There are other kinds of *ſorrel,* of nearly the ſame taſte, and poſſeſſing the ſame virtues. One of theſe is called ſheep-ſorrel, and grows commonly on dry banks, being little diſtinguiſhable from the former but by it's inferiority in ſize. Another is large, with broad leaves, and is commonly called garden-ſorrel, or round-leaved ſorrel, and this is in all reſpects equal to the common kind. But beſides theſe there is another plant, which though called a *ſorrel,* differs ſo widely from all the other ſorts, that it requires a ſeparate deſcription.

Wood-Sorrel.

THIS is a beautiful little plant, growing about wood-ſides, and in ſhady watery lanes. The root of this plant is long, ſlender, ſcaly, and fibrous, and the leaves ſpring in conſiderable numbers from it, ſtanding three together upon a ſeparate long and ſlender foot-ſtalk, of a reddiſh colour. Each of theſe leaves or diviſions is in the ſhape of a heart, which is alſo indented, hanging downwards, and the three ſmall ends drawing together on the ſummit of the ſtalk. The flowers, which are whitiſh, tinged with light purple, and moſt beautifully veined with a darker, conſiſt of a ſingle leaf divided into five parts, and ſtand alſo on ſingle ſtalks, riſing immediately from the root. The flowers are ſucceeded by large ſeed-veſſels, which when ripe, burſt aſunder with the leaſt touch, and the ſmall round ſeeds are ſcattered about. It flowers in April and May.

The leaves are ſuppoſed to excel all the other ſorts of *ſorrel* in medicinal virtues. Beaten up with three times their weight of ſugar they make an excellent conſerve, or an admirably agreeable ſyrup may be made from the juice of them. Either of theſe is good to quench thirſt in fevers, to alleviate violent heat, and excite an appetite, as they ſtrengthen the ſtomach. This plant has alſo the ſame virtues with the other ſorts, and is equally recommended as a remedy for the ſcurvy, to ſweeten the blood, and to remove thoſe obſtructions which occaſion jaundice, dropſy, and other diſorders of the like kind.

Southernwood.

THIS ſhrub, though a native of the warmer parts of Europe, flouriſhes as well in our gardens as in it's natural ſoil. The ſtem is woody, tough, and covered with a rough brown bark. The leaves are divided into fine tender parts; theſe are of a pale green colour above, and hoary beneath, and have a ſtrong, but not diſagreeable ſmell. The flowers, which grow in numbers on the tops of the branches, conſiſt of little heads of a yellowiſh green colour, and contain ſmall, longiſh, heavy ſeeds, without down, and of a pale brown colour.

The leaves and tops of the young branches are uſed medicinally in decoction, which is ſaid to be good againſt worms, but it is a very unpleaſant medicine, though it may be made leſs diſagreeable in the form of a conſerve, and in this way is recommended againſt nervous and hyſteric complaints. This plant was formerly eſteemed an antidote againſt poiſons, the bites of venomous reptiles, and mortification, and it has been ſuppoſed to poſſeſs diuretic qualities; but it is now chiefly uſed in warm ointments and fomentations.

Sow Thiſtle.

THIS weed grows every where under hedges, and by foot-paths, and is troubleſome in our gardens. It riſes two or three feet high. The ſtalk is round, hollow, angular, channelled, upright, and of a green colour. The leaves are long, ſtiff, rather narrow, but pretty deeply indented about the edges; the points made by the indentings terminating in prickles. When any part of the plant is broken, it emits a milky bitter juice. The flowers, which are large and yellow, and reſemble thoſe of *dandelion*, but are leſs, and of a lighter colour, grow ſeveral together on the tops of the branches, and ſtand in ſcaly cups, which contain downy thin flat ſeeds. The root is long, large, and white.

The leaves are uſed medicinally, but are beſt freſh-gathered; a ſtrong infuſion of them operates by urine, and removes obſtructions; they are ſometimes eaten in ſallads, but the infuſion is more efficacious. There are ſeveral other kinds of *ſow thiſtle* found in common with this, but as they all poſſeſs the ſame virtues and this has them moſt in perfection, it is not neceſſary to mention the others, which differ only in ſize, and in being without prickles.

Speedwell.

THIS plant grows commonly in dry paſtures, and on heaths, the ſtalks ſeldom exceed ſix or eight inches in height. The leaves are ſhort and oval. The ſtalks cannot ſupport themſelves upright, but trail along the ground, ſhooting out fibres at their joints, which root again, and continue the growth of the plant. The leaves are of a light green colour, ſomewhat hairy, and indented round the edges. The flowers, which are ſmall, and conſiſt each of one blue or purple leaf, grow in ſlender ſpikes, which riſe from the boſoms of the leaves, and theſe flowers are ſucceeded by ſeed-veſſels, ſhaped like thoſe of *ſhepherd's purſe*, filled with very ſmall leaves. The root is a bunch of fibres.

The whole herb is uſed, and though it is beſt freſh, does not loſe all it's virtue by being dried. An infuſion of it drank in conſiderable quantities, operates diuretically, removes obſtructions, and promotes the periodical evacuations. An opinion once prevailed, that this plant would cure the gout, but it has been long exploded. It has with better authority been preſcribed as a pectoral, and is eſteemed ſerviceable in hectic and conſumptive coughs.

Spignel.

THIS plant grows wild in ſome parts of the north of England, and riſes two or three feet high. The ſtalks are round, channelled, and ſomewhat branched. The leaves, which are large, are divided into finer parts than almoſt any other plant, but are moſt like thoſe of *fennel*; they are of a very duſky dark green colour. The flowers are ſmall and white, and ſtand in cluſters at the tops of the ſtalks, which are cloathed with a few ſmall leaves. The ſeeds are of a larger ſize than thoſe of fennel, channelled on the backs, and growing two together. The root is about the ſize of a finger at the largeſt part, it is of a brown colour, and runs deep into the earth, the head of it is covered with ſtiff hairs, which are the remaining fibres of the ſtalks of former leaves.

The root only is uſed medicinally, a decoction of it expels wind, and relieves colic and griping pains: it is alſo diuretic, and held to be ſerviceable in the ſtrangury and gravel. It was formerly eſteemed a remedy for peſtilential diſorders.

Spinage.

THIS herb is well known in kitchen gardens. It ſometimes reaches the height of two feet. The ſtalk is round, thick, and fat or full of juice. The leaves are broad and cleft at the baſes, and reſemble an arrow head. The flowers are greeniſh, and without beauty, but this is one of thoſe plants which are diſtinguiſhed into male and female. The ſeeds, which are large and prickly, growing only on particular plants. The root is white and long.

The leaves are commonly eaten at table, and are eſteemed very wholeſome; the juice of them is recommended as a medicine operating by urine, and relieving the gravel. The leaves are cooling and opening.

Spleenwort.

THIS is a plant of the fern kind, but not reſembling any of them in form. It grows upon old buildings, and about ſtone walls, in the weſtern parts of England. The root is fibrous, and from this the leaves ſpring in great numbers together, though each is a diſtinct plant; they are about five inches long, narrow, and deeply but very irregularly indented on each ſide, they are of a greeniſh colour on the upper ſurface, but brown on the under part, and covered with ſmall duſty ſeeds: when they firſt riſe from the root they are folded inward, ſo that the under part only appears, and they have more the appearance of ſome inſect than the leaf of a plant.

The whole plant is uſed medicinally; it removes all obſtructions of the liver and ſpleen, and diſorders ariſing from theſe cauſes; the powder of the dried leaves has been reported to cure the rickets, but this wants confirmation. It may be adminiſtered in tea or infuſion, and is beſt freſh, but is not without virtue in the dry ſtate.

Great Spurge.

THIS plant is not one of the many kinds of *ſpurge* which grow wild in England, but a different ſpecies. It is a native of Germany, and to be found in our gardens, where it grows two or three feet high. The ſtalk is round, ſtrong, of a reddiſh colour, and divided into many branches. The leaves are long, narrow, ſmooth, and of a pale green; they are broadeſt at the extremities. The flowers grow on the tops of the branches, are ſmall and of a pale yellow; they are followed by triangular ſeedveſſels, which contain each three round ſeeds. The root is very large, in ſome inſtances as big as a man's arm, but divided into many parts, the whole conſiſts of a ſolid ſubſtance, covered with a thick bark. Every part of the plant, when broken, emits a milky acrid juice, which burns the mouth and jaws for a very conſiderable time.

The bark of the root is uſed medicinally as a purge, but even in that ſtate it is very violent in it's operation: it operates not only by ſtool, but by vomit, and is recommended in the rheumatiſm and dropſy; but it contains ſuch a corroſive quality that it is apt to injure the ſtomach and bowels, and it is only very ſtrong conſtitutions that can bear the uſe of ſuch a remedy.

The leſſer Spurge.

THIS, though a leſs plant than the former, is rather ſtout, it is a native of the ſame part of the world, and alſo of France, but is no ſtranger in our gardens. It does not grow above a foot high. It's root is much ſmaller than that laſt mentioned, and the leaves are long, and very narrow, but round at the ends. The ſtalks are large, round, red, and divided into branches; on the tops of which ſtand the flowers, which are ſmall and yellow, and grow in cluſters, the ſeed-veſſels are large and triangular. The whole plant, like the larger ſort, is full of an acrid milky juice, but the root more than the other parts.

This is alſo violently purgative and emetic, and the bark of the root is only uſed, and though it operates with ſomewhat leſs violence, yet even this is too rough for moſt conſtitutions. The virtues aſcribed to this ſpecies of *ſpurge*, are the ſame as thoſe attributed to the other ſort.

The Star-Thiſtle.

THIS plant grows wild on heaths and commons, and by highways, but is not very frequently found. It is about two feet high. The ſtalks are round, ſolid, whitiſh, and very much divided into branches. The greater part of the eaves ſpring immediately from the root, which they encompaſs in a kind of circle, ſpreading on the ſurface of the ground; they are of an oblong form, and divided or cut along the ſides quite to the middle rib; the few leaves which grow on the ſtalk are ſmaller. The flowers ſtand very thick upon the branches, they are of a red or purpliſh colour, are of the form of the flowers of thiſtles, and growing out of ſcaly heads, each ſcale terminating in a ſharp thorn. The flowers go off in down, which contain flat white ſeeds. The root is ſingle, about the ſize of a man's finger, runs deep into the ground, and is covered with a thick bark or rind.

A ſtrong infuſion of the root is recommended for the ſtone, gravel, and colic, and is alſo preſcribed in the jaundice, and other diſorders occaſioned by obſtructions, which it removes, operating by urine.

Staves Acre.

THIS plant is a native of Italy and other warm countries, and is kept in many gardens in England. It is from two feet to two feet and a half high. The ſtalk is large, round, ſtrong, erect, and ſomewhat downy or hairy. The lower leaves are large, and like vine leaves, but of a rounder figure, and divided deeply into ſeven parts, each ſharp-pointed and indented at the edges; they are of a deep green colour, and ſtand on long, ſlender foot-ſtalks. The flowers grow in ſpikes at the ſtalks, and are of a deep blue, and large, and reſemble very much the flowers of *larkſpur*. The flowers are ſucceeded by crooked, ſharp-pointed ſeed-veſſels, containing two or three rough angular brown ſeeds of a hot acrid taſte.

The ſeeds are the only part uſed in medicine, and they are given in ſmall doſes for the rheumatiſm and the venereal diſeaſe; but they operate ſo violently by vomit, ſtool and ſpittle, that few people venture upon them. Theſe ſeeds powdered, are commonly uſed to deſtroy the vermin which infeſt children's heads that have been kept uncleanly, and this is done by ſprinkling it on, and combing it into the hair.

Golden Stæchas.

THIS plant is a native of the warmer parts of Europe, being found plentifully in Spain, the ſouth of France, and ſome of the iſlands in the Mediterranean ſea, and is kept in Engliſh gardens. It is a ſhrub of three or four feet high, and preſerves it's verdure all the year. The ſtem is woody. The leaves, which are very numerous, on long ſlender ſtalks, are long, narrow, leſs than thoſe of lavender, and hoary, eſpecially on the under ſide. The flowers are cluſters of ſmall chaffy, ſcaly heads, of a fine ſhining yellow, and ſtand at the tops of the ſtalks: they retain their colour for a long time, if they are carefully preſerved. The whole plant has an agreeable ſcent, if rubbed between the fingers, nor does this leſſen by it's being dried.

The tops of the leafy ſtalks are uſed medicinally: theſe being freſh-gathered, and given in tea or infuſion, operate diuretically, and remove obſtructions. It may be given with ſucceſs in jaundices, and obſtructions of the periodical diſcharges.

The Strawberry Plant.

THIS plant is equally well known in it's wild ſtate and in gardens. It has ſmall reddiſh roots, which have fibres at every joint, and theſe take root and propagate the plant. From theſe roots ſpring the leaves, which ſtand three together on every footſtalk, and are large, broad, ſharp at the points, and indented about the edges. At their firſt ſpringing up they are folded together, but ſoon expand, and appear full of veins. The flowers are white; they ſtand four or five together upon a long foot-ſtalk, riſing immediately from the root. They are white, each compoſed of five leaves moderately large, and have ſeveral yellow threads in the middle. The fruit is well known; when ripe it is red, of a pleaſant, tart, grateful taſte, and delightfully fragrant ſmell, with many ſmall greeniſh ſeeds on the outſide of it. An infuſion is made of the freſh leaves, to waſh or gargle ſore mouths, or ulcerated throats or gums. This infuſion is ſaid to be diuretic, and to be ſerviceable againſt the jaundice. The fruit is cooling and wholeſome, and may be eaten to quench thirſt and allay heat in fevers.

Succory.

THIS plant is only to be met with in gardens, where it grows near a yard high, but is not remarkable for beauty. The ſtalk is round, angular, channelled, large, ſtrong, and hairy. The principal leaves ſpring immediately from the root, and theſe are long, narrow, deeply indented, of a bluiſh green, and alſo ſomewhat hairy: they are broadeſt at the baſes, where they in a manner encompaſs the ſtalks. The leaves on the ſtalks are ſmaller, and among theſe grow the flowers, which reſemble in ſhape thoſe of dandelion, but are of a lively blue colour, and grow from the ſides, and not from the tops of the ſtalks. The ſeed is long, and of a brown colour, but does not grow among down; it flowers in June. The root is thick, but tapers; it is of a brown colour on the ſurface, but white within, and full of a bitter milky juice.

The root is uſed medicinally, and an infuſion of it is preſcribed to remove obſtructions and cure the jaundice. A decoction of the whole plant freſh-gathered, operates freely by urine, and is recommended as a remedy for the gravel, ſtone, and ſuppreſſion of urine. It alſo gently promotes the monthly diſcharges. The ſeeds are ſaid to be cooling.

Sumach.

THIS ſhrub is a native of Italy, Spain, and other warm countries, but is common in gardens and plantations in Great Britain; where, however, it ſeldom grows more than ten or twelve feet high. The wood is brittle, and the bark of a dark brown. The leaves are winged and very elegant, each conſiſting of many pairs of ſmaller, terminated by an odd one. Theſe taken ſingly are oblong, of a deep green, and indented at the edges, and ſomewhat reſemble elm leaves, only that theſe are rather longer. The flowers, which grow in very large cluſters, are white, and are ſucceeded by ſmall, round, flat, hairy ſeeds, of a harſh aſtringent taſte. There are other ſorts of *ſumach* to be found in the gardens of thoſe curious in botany; but this is the kind which is allowed to poſſeſs the moſt medicinal virtues, though it is by no means the moſt beautiful.

The ſeeds and tops of the young ſhoots are both uſed, the former, dried and powdered, is recommended to check purgings, and to ſtop internal hæmorrhages, and the overflowings of the monthly diſcharges.

The freſh tops are preſcribed in infuſion, to ſtrengthen the ſtomach and bowels. The bark of the root has in ſome meaſure the ſame qualities, and both the tops, ſeeds, and roots, were formerly ſuppoſed to reſiſt putrefaction, and ſtop the progreſs of gangrenes and mortifications.

Swallow-wort.

THIS plant is alſo a native of warmer climates, but is very common in our gardens. The root is ſpreading and fibrous, and immediately from it ſpring many round, ſlender, jointed ſtalks, of a dark colour, and from one to two feet high. The leaves, which are round at the baſes and ſharp at the extremities, are about three inches long, and half the breadth at the wideſt part. They are of a dark green colour, and ſtand in pairs at the joints, on very ſhort foot-ſtalks. The flowers are ſmall, white, and ſtar-ſhaped, conſiſting each of five leaves, and are ſucceeded by two pods growing together; but theſe ſeldom appear, and ſcarce ever bring ſeeds to perfection in this climate.

An infuſion of the freſh root is recommended as a remedy for the jaundice and dropſy, as it works by urine and removes obſtructions. Dried and given in powder, it promotes perſpiration, and is given in malignant and peſtilential fevers. It was once eſteemed a very powerful antidote to poiſons, venomous ſtings, and bites.

Tamarind Tree.

THIS tree is a native both of the Eaſt and Weſt Indies, where it grows to a very conſiderable magnitude. It is kept in many gardens and plantations in England. The trunk is covered with a pale-coloured rough bark; the branches with one of a lighter colour and ſmoother. The leaves are winged, and each compoſed of a great many pairs of ſmaller, ſet on a common rib, but without the uſual odd one at the end. The ſeveral ſmall leaves are oval, of a very light green, inclined to white or hoarineſs. The flowers are large, and ſtand in cluſters of eight or ten together on the young ſhoots, and very handſome, each being compoſed of four yellow and three white leaves, the latter frequently ſtained with red or purple. The fruit is a flat pod, broad, hard, and of a brown colour, with regular knobs, or protuberances like bean-pods; theſe pods are from two to four inches long, and contain a pleaſant acid pulp, and hard brown ſeeds or ſtones, of a bright cheſnut colour, connected together by many fibres. The pulp, ſtrings, and ſeeds, are brought to England, and are the tamarinds of the ſhops. The pulp is ſeparated for uſe. It is a gentle and moſt excellent purge, operating alſo by urine; it is a remedy for the jaundice, and other diſorders occaſioned by obſtructions. The pulp is uſeful alſo to moiſten the mouth and quench thirſt in fevers; and, mixed with water, makes an admirable cooling drink for all inflammatory diſorders.

Tamariſk.

THIS tree is found wild in Spain and the ſouth of France, and is kept in gardens in England, where it ſeldom arrives at any conſiderable ſize, though it is much larger in it's native climate. The bark of the trunk is of a dark brown, and rough; and that of the branches lighter coloured, and ſmooth; and the young ſhoots are of a full but bright cheſnut colour, and very ſlender. The leaves are of a fine lively green, elegantly and regularly divided into ſmall parts: they ſomewhat reſemble thoſe of cypreſs, but are thin, ſmooth, and delicately tender. The flowers, which are very ſmall, of a pale red colour, and compoſed each of five leaves, ſtand in ſpikes at the extremities of the young ſhoots, and grow cloſe together; and as ſeveral of theſe ſpikes ſometimes riſe from the ſame branch, they make a conſpicuous and pleaſing appearance. The flowers are ſucceeded by very ſmall ſeeds, lodged in a downy ſubſtance.

The bark is uſed medicinally dried, and the tops of the branches freſh, and both poſſeſs the ſame virtues; the former is to be given in decoction, the latter in a light infuſion, or tea; they are equally good to remove obſtructions, promote the periodical evacuations, and cure the jaundice and rickets. The wood and bark were formerly eſteemed ſpecific againſt diſorders of the ſpleen.

Garden Tanſy.

THIS plant is only found in gardens; it riſes about two feet high; the root is large, ſtringy, and fibrous; the ſtalks are round, erect, and of a light green colour; the leaves are large, yellowiſh, and winged; each being compoſed of ſeveral pairs of ſmaller leaves diſpoſed on each ſide of a common rib, and terminated with an odd one: each of theſe is narrow, long, pointed, and indented at the edges. The flowers, which grow in large cluſters at the ſummits of the ſtalks, are round, yellow, and naked: the whole plant has a ſtrong, freſh, chearing ſmell.

A ſtrong infuſion of the leaves, freſh-gathered, operates by urine, and removes obſtructions of the liver, ſpleen, and other inteſtines; it alſo gently promotes the monthly diſcharges. The flowers, dried, powdered, and mixed with treacle, are commonly given to deſtroy worms, and very frequently produce that effect.

Wild Tanſy.

THIS plant grows wild about way-ſides and commons, in different parts of England; it riſes to no conſiderable height, the ſtalks creeping upon the ground, and taking root at the joints. The ſtalks are round, and of a reddiſh colour, and the leaves on theſe are very large, and like thoſe of the plant laſt deſcribed; each compoſed of a great many pair of ſmaller, ſet on each ſide of a common rib, and terminating with an odd one. They do, indeed, in moſt reſpects reſemble the leaves of garden tanſy, the ſmaller leaves of which they are compoſed being alſo oblong, narrow, and indented; but theſe are of a hoary or ſilvery green on the upper ſurface, and perfectly ſilvery or hoary beneath. The flowers, which ſtand on ſhort foot-ſtalks, are large and yellow, not wholly unlike the flowers of crow-foot, but much more elegant.

The leaves only are uſed medicinally, and a ſtrong infuſion of them is ſaid to be efficacious in ſtopping the bleeding of the piles, and bloody ſtools. A light infuſion of tanſy, ſweetened with honey, is recommended as a gargle for ſore throats.

Tarragon.

THIS is a garden plant, and ſeldom grows above eighteen inches high; the ſtalk is round, erect, green, and much branched; the leaves, which ſtand irregularly and in great numbers on the branches, are long and narrow, ſomewhat reſembling thoſe of hyſſop, but ſharper pointed, and of a dark green colour. The flowers, which are ſmall and greeniſh, and in form like thoſe of ſouthernwood or wormwood, but fewer and on longer foot-ſtalks, ſtand in ſpikes at the extremities of the ſtalks. The whole plant has a ſmell ſomewhat like fennel, but it is ſtrongeſt in the leaves.

This plant is ſaid to be warm and cordial, and to be uſeful in expelling wind. An infuſion of the freſh tops operates as a diuretic, and gently promotes the monthly diſcharges.

Teazle.

THIS is a tall ſtout plant, common in banks, under hedges, and by road ſides; it ſometimes riſes ſix feet high. The ſtalk is ſingle, large, white, very ſtrong, ſomewhat prickly, and very much branched towards the top. The leaves grow two together, and encompaſs the ſtalk at the baſe, forming a hollow there which catches and retains the rain, and theſe leaves alſo are prickly on the under parts along the ribs. The flowers, which are ſmall and reddiſh, grow on heads as large as an apple, and of an oblong form, theſe are of a pale colour. The root is thick and fibrous, and the taſte of it bitter. An infuſion of this root, which is beſt freſh, ſtrengthens the ſtomach, and excites an appetite. It is alſo recommended as effectual in removing obſtructions of the liver, and curing the jaundice. The water, which ſtands in the hollow of the leaves, has been ſuppoſed to be a good eye-water in caſes of inflammations, and it is alſo eſteemed coſmetic, and powerful in taking away freckles.

There is alſo another kind of teazle, cultivated for the ſake of the heads, which is uſed in dreſſing cloth; this poſſeſſes the ſame virtue as the other, nor do they differ very materially in appearance.

Bleſſed Thiſtle.

THIS plant, which is a native of the warmer countries of Europe, was once in much greater eſteem than at preſent, though it is ſtill raiſed with us in gardens for medicinal uſes. The root is ſmall and woody, periſhing continually. The ſtalk riſes two feet high, and is reddiſh, ſlender, very much branched, and ſo feeble that it is ſcarce able to keep erect under the weight of it's numerous leaves and heads. The leaves, which are long and narrow, and very deeply and unevenly cut in on both ſides, are of a dull green colour; they end in a point, appearing like a thorn, but too tender to be hurtful. The flowers, which grow on the tops of the ſtalks, in roundiſh heads, ſurrounded with leaves ſmaller and leſs divided than thoſe on the lower part of the plant, ſtand in ſcaly heads or cups, which are ſomewhat prickly, and each of the cups of the flowers ends in a long brown thorn, indented on both ſides like a ſaw.

The ſeed is long, round, and channelled, and of a brown colour; it's appearance is rendered peculiar by a briſtly crown on each ſeed.

It is eſteemed a good ſtomachic bitter, and a decoction of it, taken in conſiderable quantities, is uſed as a vomit; leſs quantities, it is ſaid, create an appetite, prevent ſickneſs, and check retchings. The leaves, dried and powdered, have been recommended to deſtroy worms; and it was formerly accounted cordial and perſpirative, and preſcribed in fevers of all kinds; but this uſe of it is now diſcontinued.

Milk Thiſtle, or Lady's Thiſtle.

THIS plant grows commonly by road-ſides and on banks, and it's appearance is remarkably elegant. The leaves, which riſe immediately from the root, are in ſome inſtances two feet long, and more than one broad, of a beautiful dark green, ſpotted or variegated all over in irregular figures, with a milky whiteneſs; the leaves are prickly and indented deeply at the edges, and they ſpread themſelves round the root, in a compaſs of more than a yard diameter, but lying near the ground, are apt to be over-ſpread with duſt. In the centre of the leaves riſes a ſingle ſtalk which grows four or five feet high, is round, thick, very ſtrong, erect, and divided at the top into ſeveral branches. The leaves on the ſtalk reſemble thoſe from the root, and are variegated with white in the ſame manner. At the tops of the ſtalks grow the flowers, which differ only in ſize from thoſe of other thiſtles, being twice as large, and much more beautiful. The flowery part is of a dark but fine purple. The head itſelf conſiſts of beautiful ſcales, each terminating in a ſingle and very ſtrong prickle, and theſe ſcales are perfectly regular in their ſize and order. The root is long and large, running deep in the ground; the ſeeds are flat, oblong, and white, and incloſed in a conſiderable quantity of down.

An infuſion of the freſh roots and ſeeds is recommended to remove obſtructions, and cure the jaundice and dropſy: it operates by urine. The ſeeds, in an emulſion with barley-water, are ſaid to give relief in pleuriſies. The young leaves, with the prickles cut off, are ſometimes boiled by way of cabbage, and are highly extolled both for wholeſomeneſs and delicacy of taſte.

Thorn Apple.

THIS plant is a native of warm climates, but is cultivated in our gardens; and though ſometimes found apparently wild, it's growth is accidental, and from ſeeds which have been ſcattered from gardens.

The root is white, thick, ſomewhat woody, branched, and fibrous, the ſtalk riſes two or three feet high, and is round, large, hollow, and divided into many branches. The leaves, which are very large, of an oblong ſhape, and of a lively green colour, are divided at the edges, and ſomewhat reſemble thoſe of common nightſhade, though larger and of a very offenſive ſmell. The flowers are very large, white, long, and hollow tubes, but they open at the brims, and are formed into angular points. The fruit or ſeed-veſſel is nearly as big as a large walnut, and is covered all over with long ſtout upright thorns; as theſe ripen they divide into four parts, and opening diſcloſe flat black rough ſeeds. It flowers in July.

The leaves of this plant are ſometimes uſed as external applications to burns and inflammations, but this is not always prudent, as they are in ſome inſtances too cooling

and

and repellent. The roots and ſeed have a tendency to promote ſleep; but opium is a medicine ſo ſafe, and it's operation ſo univerſally known, that theſe roots and ſeeds are ſeldom or ever uſed at preſent.

Goat's Thorn.

THIS prickly ſhrub is a native of the eaſt, at leaſt there only it produces gum, though it is alſo found in France and Italy, and in England it is cultivated in gardens. It does not grow above two or three feet high, but it ſpreads much, and is very full of branches. The ſtem is tough, firm, and woody, and is covered with a rough bark of a light colour. The branches are alſo tough, and the bark of them of the pale colour, but ſmoother. The leaves, which are long and narrow, conſiſt each of ſeveral pairs of ſmaller, ſet on a middle rib, which is continued beyond them, and terminates in a thorn, and when theſe pairs of leaves fall off, the whole rib appears a white thorn of that length. The flowers grow ſingly towards the tops of the branches, and are white, of the figure of a broom flower, but ſmaller. The pods, which follow, are ſhort and flat, and contain two or three ſmall round ſeeds, but they are ſeldom produced in this country.

The plant itſelf is not uſed in medicine, but the gum which is ſold in the ſhops under the names of *gum tragacanth*, or *gum dragon*, flows from the root or the lower part of the trunk of this ſhrub, in the hotteſt ſeaſons of the year.

This gum is imported into England from Turky, in twiſted and curled pieces of different ſizes; it's appearance is ſometimes white and ſometimes yellowiſh, but the former is to be preferred; a ſmall quantity of it in water produces a very ſtrong jelly. It is recommended in coughs ariſing from defluxions of ſharp humours, and is ſaid to leſſen the acrimony of urine, as well as of the bowels, and to correct ſharp ſtools; but it is a diſagreeable medicine. It is difficult to powder, and is not pleaſant even in mucilage. A very thin jelly of it is ſaid to be uſeful for inflammations of the eyes.

Thoroughwax.

THIS plant grows wild in corn-fields, and reaches ſometimes the height of three feet. The ſtalk is round, ſtrong, erect, of a whitiſh colour, and, towards the top, divides into ſeveral but not many branches. The leaves are broad, and of an oval figure, not indented, and the ſtems run through them towards the lower parts, for they have no foot-ſtalks. The leaves are of a bluiſh green colour. The flowers, which are ſmall and yellow, ſtand in tufts or cluſters of five in each at the ſummits of the branches, with an equal number of leaves placed under each tuft, of which the three outermoſt are the largeſt. Two oblong channelled ſeeds ſucceed each flower. The root is ſmall, woody, and fibrous.

The leaves are applied externally by common people to wounds, bruiſes, and contuſions; the ſeeds are ſometimes adminiſtered inwardly, to prevent ill conſequences from internal hurts.

Thyme.

THIS plant is univerſally known, being kept in every kitchen garden. The ſtalk, which is hard and woody, ſeldom exceeds eight or ten inches in height; the branches are extremely numerous. The leaves, which are ſmall and of a dark-green, ſtand in pairs at the joints. The flowers grow in a kind of looſe ſpikes at the tops of the ſtalks. The root is a bunch of fibres, round a woody continuation of the ſtem. The whole plant has a ſtrong agreeable ſmell, and a warm aromatic taſte.

An infuſion of the freſh tops of thyme, is eſteemed ſerviceable in aſthmas and ſuch oppreſſions of the lungs as are occaſioned by tough phlegm. It is alſo recommended as a remedy for nervous complaints; but the wild thyme, called mother of thyme, is preferable for this purpoſe. The oil made from thyme cures the tooth ache, a drop or two of it being put upon cotton, and applied to the tooth; and this is generally ſubſtituted for oil of origanum, or marjoram.

Toad Flax.

THIS plant is commonly found wild on banks and hedges, and riſes a foot and a half high. The ſtalk is round and large, ſtrong, erect, and not branched. The leaves, which ſtand ſo numerouſly on the ſtalks, as almoſt to cover them, are oblong, narrow, ſmooth, not indented at the edges, but pointed at the ends, and of a bluiſh green colour. The flowers are yellow, and grow in a tuft, or ſhort and thick ſpike, on the tops of the ſtalks; they are of conſiderable ſize, and the fore part is ſaid to reſemble the human mouth, the lower part of which is of a darker, and the upper of a lighter colour; they are alſo ſpurred or heeled: each flower is ſucceeded by a ſeed-pod, round, but divided into two parts, each containing ſeveral ſmall black ſeeds. It flowers in July, and the root is ſmall and creeping.

An infuſion of the tops, freſh-gathered, or of the whole herb dried, is opening and diuretic, and is recommended againſt the jaundice, and all internal obſtructions. It alſo gently promotes the periodical evacuations. A cooling ointment may be made, by boiling the freſh plant chopped to pieces in lard, till it is criſp, and then ſtraining it off. It will be of a fine green colour. This ointment is ſaid to be excellent for the piles.

Tormentil.

THE root of this common wild plant is large in proportion to the ſize of the plant, ſometimes crooked and knobby, of a reddiſh colour within, but brown without and fibrous. The ſtalks are ſeven or eight inches long, round, and of a browniſh colour, but too ſlender and feeble to be upright. Five and ſometimes ſeven leaves ſtand together at a joint, which all riſe from the ſame baſe; theſe are narrow, long, pointed, and indented at the ends, and of a dark green colour. The flowers, which are compoſed each of four leaves, are ſmall, but of a beautiful ſhining yellow, grow on ſlender foot ſtalks, and reſemble in ſhape and colour the flower of crowfoot, but are of a much leſs ſize. The ſeed is ſmall, and ſtands naked on the cup. It is found on commons, and by wood ſides, and flowers in the ſummer months.

The root only, is uſed medicinally; it is beſt dried, and may be given in powder or decoction. The powder is recommended to reſtrain diarrhæas and dyſenteries; it is alſo good againſt the bleeding of the piles, bloody ſtools, and the overflowings of the monthly diſcharges. This root, cut in pieces, and added to hartſhorn drink in the boiling, in the proportion of an ounce to a pint, gives it a pleaſing colour, and communicates it's virtues. The root is ſaid to be cordial, as well as aſtringent, and to promote perſpiration gently. And the decoction juſt mentioned is thought ſerviceable in ſuch fevers as are attended with purgings, which it checks moderately, and at the ſame time abates the fever. A gargle of this decoction is ſaid to faſten teeth which are looſe, and to help the falling of the uvula.

Trefoil.

THIS plant is common in our meadows and fields, and is univerſally known. It grows ten or twelve inches high; the ſtalk is round, but not upright. The principal leaves riſe immediately from the root, and ſtand three together, on long hairy foot-ſtalks, each of theſe is of an oval figure, but pointed; they are of a deepiſh green colour above, but paler underneath, and have generally a white ſpot in the center of each leaf. The leaves on the ſtalks are nearly of the ſame form, but conſiderably leſs. The flowers, which ſtand at the tops, in a ſort of ſhort, round, thick ſpikes, are ſmall, and of a purple colour; they are ſucceeded by little flat pods, each containing two or three ſmall round yellowiſh ſeeds.

An infuſion of the flowers, freſh-gathered, is ſaid to be good for fluxes and dyſenteries, and to reſtrain the bleeding of the piles; the infuſion of the flowers operates diuretically, and is ſaid to relieve the ſtranguty and heat of urine. They are alſo ſometimes applied in cataplaſms, or poultices to inflamed tumours.

The Turnep.

THIS plant is well known in fields and gardens; the root is generally round and white, though ſometimes purpliſh on the upper part. The leaves are of conſiderable length and breadth, and of a dark green, deeply cut at the edges, and blunt and round at the extremities; the ſtalks are three feet high, round, ſmooth, ſtrong, erect, and branched, and are furniſhed with ſmaller, ſmooth, and undivided leaves; the flowers are four-leaved, yellow, and of inconſiderable ſize; they ſtand in long ſpikes, and are ſucceeded by long ſlender pods, containing many round black ſeeds.

The roots are commonly eaten, and are eſteemed wholeſome; they alſo poſſeſs medicinal virtues: they may be cut into ſlices, and ſtewed, or baked, with ſugar, or ſugar-candy, till their juice, with the ſugar, becomes a ſyrup; and this is a good pectoral medicine, and ſerviceable to relieve coughs and ſhortneſs of breath; and a poultice of theſe roots is an admirable remedy for chilblains, which may alſo, b waſhed with the water in which they have been boiled; and theſe applications ſeldom fail of giving relief.

Turpentine Tree.

THIS tree is a native of the eaſt, and of ſome of the iſlands in the Levant, where it grows to a great ſize, but in the plantations in England, where it is frequently met with, it never riſes to any great height. The bark is brown and rough; the branches, which are numerous, ſtand irregularly: the leaves conſiſt each of a double row of ſmaller, which are oval, and ſet oppoſite each other on a common rib, terminating in an odd one. The leaves are of a dark ſhining green; the flowers, which are ſmall and purple, appear only in the form of cluſters of threads in the early ſpring before the leaves. They are ſucceeded by longiſh hard nuts, with kernels of a reſinous taſte and ſmell; the whole ſhrub has alſo a ſimilar ſmell.

The *Chio Turpentine*, the moſt eſteemed of all the balſams of this kind, is obtained from it in the iſland of the ſame name. It is here of a whitiſh colour, but that which is procured in the iſland of Cypreſs is browner. It is highly eſteemed as a pleaſant and excellent medicine, operating by urine, and affording relief in coughs, and other diſorders of the lungs: it is alſo preſcribed for the ſtone, gravel, and retenſion of urine, and is given to ſtop the whites, and diſcharges occaſioned by weakneſſes after venereal complaints.

Tutſan.

THIS plant grows wild in woods and under hedges, and is very common in ſome parts of the kingdom, and particularly in the weſt of England, though it is alſo kept in many gardens: it grows two feet high; the ſtalks are ſtrong and ſmooth, of a reddiſh colour, generally erect, and only branched into a few young ſhoots towards the top. The leaves, which ſtand in pairs at the joints oppoſite to one another on ſhort foot-ſtalks, and at no very conſiderable diſtance, are very large above, though ſmaller below, and of a ſhape inclining to oval: their colour is a browniſh green; they are ſmooth, and not indented at the edges. The flowers grow ſeveral together on the tops of the ſtalks, and are but ſmall; each of them conſiſts of five yellow leaves with threads in the middle, of the ſame colour, which emit a reddiſh juice on being preſſed; they ſomewhat reſemble the flowers of Saint John's wort. They are ſucceeded by a kind of berry, green at firſt, but turning black when ripe, and containing a great quantity of ſmall ſeeds and purple juice. The whole plant, in the cloſe of the ſummer, ſometimes appears of a beautiful blood-red colour, but this is only where it is expoſed to the ſun. The root is ſmall, reddiſh, fibrous, and irregular; it creeps juſt below the ſurface of the ground. The leaves dried have a very agreeable ſmell.

The leaves are ſtrongly recommended even by modern writers as a cure for freſh wounds. The young and tender ones, which grow on the young ſhoots at the tops of the branches, are to be preferred, and are directed to be bound upon the wound; in which way they are ſaid to ſtop the bleeding, and effect a ſpeedy cure. An infuſion of them taken inwardly is alſo preſcribed as a remedy for internal wounds and bruiſes.

Twy Blade.

THIS pretty plant is commonly found in our meadows in the early ſummer months. It riſes to the height of a foot; the ſtalk is round, green, brittle, and erect; it bears only two leaves, which are of conſiderable length and breadth, of an oval form, and ſtand oppoſite to each other, ſomewhat leſs than half way up the ſtalk. The flowers, which are ſmall and greeniſh, and ſomewhat reſemble thoſe of the orchis, ſtand in a long ſpike; the ſeeds are very ſmall, and the root is ſlender, white, and fibrous.

A ſtrong infuſion of the leaves and ſtalk, freſh-gathered, is recommended to reſtrain the bleeding of the piles; and the juice, or an ointment made with it, to be applied externally, for the ſame complaint.

Garden Valerian.

THOUGH this plant is a native of the Alps, and other mountainous parts of the continent of Europe, yet it is common in our gardens. It grows three feet high; the ſtalk is erect, round, channelled, and hollow; the leaves, which ſpring immediately from the root, are of conſiderable ſize, and ſome of them are divided deeply on each ſide, though others are intire; but they all terminate in obtuſe points, and are not indented at the edges. Thoſe on the ſtalks are ſmaller, and are all deeply cut without exception: the ſtalks divide as they riſe into ſeveral branches, each of which has a leaf at it's ſeparation from the ſtem; at the tops of theſe branches ſtand the flowers in large tufts or cluſters. They are ſmall and white, each conſiſting of a long narrow tube, and are ſucceeded by channelled ſeeds with downy tops. The root is about the ſize of a man's finger, and is fibrous, and of a brown colour; it creeps juſt under the ſurface of the ground, and has an appearance like a caterpillar with many legs; it emits a ſtrong ſmell, and particularly when it is dried.

This root is uſed medicinally. A decoction of it is given in malignant and contagious fevers, and in ſuppreſſions of the monthly diſcharges, and other obſtructions. It acts as a perſpirative, and works alſo by urine. It is cordial to the ſtomach, and uſeful in all nervous diſorders.

Wild Valerian.

THIS tall plant is a native of Great-Britain, and is found in moiſt woods, wet ditches, and other watery places; it is not wholly unlike the *garden valerian* in it's figure and growth, and poſſeſſes great virtues. It riſes a yard high. The ſtalks are round, channelled, erect, hollow, and of a light green colour. The leaves are large and handſome; they are winged, and conſiſt each of ſeveral pairs of ſmaller, ſet on a common rib, with an odd one at the end. Theſe wings are long, narrow, indented at the edges, of a pale green colour, and ſomewhat hairy. The flowers ſtand in large tufts or cluſters at the tops of the ſtalks, and are ſmall and of a pale purple colour, and the ſeed reſembles that of the garden kind. The root is white, and is compoſed of a great many thick ſtrings or fibres. It is of a very ſtrong and diſagreeable ſmell, and this is much increaſed by it's being dried.

The root is uſed medicinally, and, given in powder or infuſion, is an admirable medicine in nervous diſorders. It is even ſaid that it will cure the epilepſy; but it's good effects in head-aches, depreſſion of ſpirits, and tremblings of the limbs, are unqueſtionable; in ſuch caſes few medicines are ſo efficacious.

Vervain.

THIS is a wild plant found commonly about path-ways, and by the road-ſide. The root is white, ſlender, ſpreading and fibrous. It grows two feet high. The ſtalks are numerous, ſquare, ſtrong, ſomewhat hairy, and frequently brown or purpliſh. The leaves, which grow in pairs at each joint, are of an oblong form, narrow, cut in at the edges, of a dull green colour, and of a wrinkled and rough appearance. The flowers, which are compoſed of one leaf cut into five parts, are white, tinged with purple; they grow in a long ſpike, on which are flowers, buds, and the remaining cups or ſeed-veſſels, but only two or three flowers are open at a time. Each ſeed-cup contains four ſmall longiſh ſeeds.

An infuſion of the freſh-gathered tops is recommended to remove obſtructions of the liver and ſpleen, and to relieve the jaundice, dropſy, and gout. It is a cordial to the ſtomach, and nervous complaints are ſaid to be removed by a continued uſe of it. It has been alſo highly extolled of late for the cure of ſcrophulous complaints, and a treatiſe hath been written to recommend the uſe of it externally and internally.

The Vine.

THIS plant or ſhrub is too common in our gardens to require a very particular deſcription. It is weak, and unable to ſupport itſelf. In this country it generally grows againſt walls, but in thoſe countries where it is cultivated for the purpoſes of making wine, it is trained in eſpaliers; the trunk and branches are covered with a rough bark; the branches are long and ſtraggling; the leaves are round in the whole figure, but are deeply cut into five or ſeven diviſions. The flowers are ſcarce obſervable. The fruit is round or oblong, juicy, and produced in large bunches. Though no part of the *vine* itſelf, as it grows with us, is uſed medicinally, the ſeveral kinds of wine produced from the grape are, in many diſorders, medicines of themſelves, the red wines in particular in all putrid diſeaſes; the dried fruit alſo, in the form of raiſins and currants, are in conſtant uſe; the different kinds of raiſins are cured differently, ſome being left to dry on the vines after the ſtems of the bunches are almoſt cut aſunder; and others, ſuch as the Malaga, being cut off, dipped in a boiling lye made from the aſhes of vine-cuttings, and then expoſed to the ſun to dry; but theſe and currants poſſeſs the ſame virtues, are good in coughs, tenderneſs of the lungs, and conſumptions. They are alſo great ſweeteners of the blood, and are a very wholeſome food with bread or biſcuit for perſons of ſcorbutic or ſcrophulous habits.

The beſt vinegar is alſo the produce of the grape, being the wine turned ſour; and ſpirit of wine and brandy of the very beſt kinds are procured from wine by diſtillation. The ſubſtance called tartar, of which that moſt excellent medicine the cream of tartar is made, is only the ſalt particles of the grape, which adhere to the wine caſks; ſo that we are indebted to the wine for more and better medicines than to any other vegetable production whatſoever.

Violet.

THOUGH this beautiful plant grows wild in our woods and hedges, yet is it's ſimple fragrance ſuperior to all the richeſt perfumes of the Eaſt. It is a ſmall, low, creeping plant, and even it's flowers are hid in obſcurity. The ſtalks are round, creeping, and of a green colour; they ſeldom become erect, but ſpread themſelves upon the ſurface of the ground, and take root at the joints. The leaves ſpring from theſe rooted parts; they are large, and ſtand on long foot-ſtalks. They are of the ſhape of an inverted heart, indented round the edges, and of a dark-green colour. The flowers, each of which conſiſts of five leaves, are of a deep and beautiful purple, with a ſpur or heel of the ſame colour; they ſtand ſingly on ſlender foot-ſtalks which riſe among the leaves, and are covered by them. The flowers are uſed medicinally; boiling water is to be poured upon them in a quantity juſt ſufficient to cover them; and, after ſtanding twelve or eighteen hours, it is to be ſtrained off; ſugar is then to be added to it in the proportion of two pounds to a pint of the liquor, and this being melted over the fire, makes the ſyrup of violets. This is an excellent gentle purge for children, and good in pains of the breaſt and lungs, being cooling and moiſtening. The leaves, dried, are uſed in decoctions for clyſters, and make an ointment for inflammations. An infuſion of them operates by urine, and is eſteemed a remedy for the ſtone and gravel, but the ſeed is preferred for theſe complaints.

Viper's Graſs.

THIS tall plant is a native of the warmer parts of Europe, but is kept in our gardens. It riſes three feet high; the ſtalk is round, large, erect, and ſtrong; the leaves, which are numerous, ſtand irregularly on the ſtalks; they are long, narrow, pointed at the extremities, and not indented at the edges; they are of a light green colour. Thoſe which ſpring from the root are alſo long and narrow, but they are much larger than thoſe on the ſtalks. The flowers, which are of conſiderable ſize, reſemble dandelion-flowers in ſhape, are of a moſt beautiful pale yellow colour, and ſtand at the tops of the branches; the ſeed is crowned with a white down; the root is long, large, and brown, and this is the part uſed medicinally. It is beſt freſh taken up and given in infuſion; it is cordial and perſpirative, and is eſteemed good in fevers, though it is not at preſent much uſed.

Viper's Bugloſs.

THIS plant grows wild about our pathways, and on the banks of hedges and ditches; it riſes a foot or eighteen inches high; the ſtalk is round, large, firm, erect, and ſomewhat hairy; it is of a light aſh-colour, marked with ſpots and lines of blue, red, and purple. The leaves, which are long and narrow, are rough, and of a dark, dull green; they are broad and blunt at the points, and are without foot-ſtalks; the flowers are large, and of a beautiful blue; with red threads in the middle, and grow in ſpikes curled inwards; they are each ſucceeded by four rough ſeeds, which have been compared in ſhape and appearance to viper's heads. The root grows deep in the earth, but is not much branched; it is large, and of a brown colour. The leaves are uſed medicinally; thoſe which grow from the root are preferred. An infuſion of them is accounted cordial and perſpirative; it is recommended in fevers, and againſt head-achs, and all nervous complaints. The ancients eſteemed it not only an antidote but a preventive to the poiſons communicated by the bites of vipers and other venomous reptiles; and they had a notion that holding the plant in the hand a ſhort time would prevent the approach of any venomous creature for that day.

The Walnut Tree.

THIS tree is common in gardens, walks, and plantations. It grows to a conſiderable ſize, and is much branched. The leaves are of the winged kind, very large and long; each conſiſts of a double row of ſmaller, with an odd one at the end. Each of the ſmall leaves is of an oval figure, of a fading or yellowiſh green colour, and of an agreeable ſmell. The flowers are ſmall; theſe alſo are yellowiſh, and grow in looſe catkins. The nuts grow two or three together, and are covered with a green thick coat, beneath which is a hard wrinkled ſhell, which is divided into two parts, and contains a white ſweet kernel, incloſed in a thin, bitter, acrid ſkin.

The bark of the walnut-tree is eſteemed a good emetic, and may either be given green in infuſion, or dried in powder; it operates eaſily and briſkly. The ſkin which covers the kernel has an aſtringent quality, and is good againſt fluxes. The green nuts, preſerved, have been eſteemed a good antidote againſt infection; and the oil, expreſſed from the kernel, a powerful remedy for the gravel and ſtone.

Wall Flower.

THIS plant grows wild on old walls, and bears yellow and ſweet-ſcented flowers. The ſtalks are numerous, woody, and about a foot high. The leaves are alſo numerous, long, narrow, and of a dull green colour. The flowers grow in looſe cluſters, at the tops of the ſtalks, and are of a moderate ſize. They are ſucceeded by long ſlender ſeed-veſſels or pods, containing thin, flat, reddiſh ſeeds.

An infuſion of the flowers, freſh-gathered, is recommended as a remedy for the headache, and other nervous diſorders, and to promote the periodical diſcharges. Steeped in oil, they give it a cordial warmth, and render it ſerviceable in pains of the limbs; but theſe flowers are not at preſent in any great reputation.

Water Arrow-head.

THIS plant grows wild in ditches and watery places. It grows two feet and a half high; but the greateſt part of the ſtalk is generally immerſed in water, little more than the ſpike of flowers appearing above the ſurface of it. The leaves, which ſtand on round, large, and very long foot-ſtalks, are of a pleaſing green, and are broad, bearded at the baſes, and ſharp at the points, reſembling, according to it's name, an *arrow-head*. The flowers are of a gloſſy white, of moderate ſize, and are ſupported on a round thick ſtalk.

It has been cuſtomary with common people in many parts of England to apply theſe leaves bruiſed to inflammations, from an apprehenſion that they are cooling; but this is not to be depended on, nor is the external application of cooling medicines at all times ſafe.

Water Plantain.

THIS tall plant alſo grows commonly in waters and ditches, but has not the leaſt reſemblance of any kind of plantain, except in the form of the leaves; from which circumſtance, however, it derives it's name. The root is compoſed of a large bunch of fibres, from whence riſe, in ſpring, a number of oblong, broad leaves, of a beautiful green colour; in which particular it does not reſemble plantain any more than in conſiſtence, though, as we have already obſerved, the ſhape of them is like thoſe of that plant. Theſe leaves are perfectly ſmooth, of a ſhining ſurface, and criſp or brittle; they ſtand for many months before the ſtalk appears, and in this ſtate it muſt have obtained the name. The ſtalk riſes two feet or more in height, and is round, ſtrong, and erect; it is divided at the top into a vaſt number of branches, thoſe into others ſmaller, and even theſe laſt are ſubdivided. On the tops of the laſt diviſions, the flowers, buds, and ſeed-veſſels, appear at once, forming all together the appearance of a cone. The flowers are ſmall and white, conſiſting each of three leaves; they ſtand but a ſhort time, and only a few are open together.

The ſeed is the part uſed medicinally; to procure which, the plant is to be ſuffered to ſtand till it is thoroughly ripe, when it muſt be cut up gently, and laid upon a table two or three days to dry; after which, a ſmart ſtroke or two will diſlodge the greateſt part of the ſeeds. They are recommended to reſtrain the overflowings of the monthly diſcharges, and all other internal hæmorrhages; the beſt way of adminiſtering them is in powdered electuaries, of which ſmall doſes are to be taken at a time, and frequently repeated.

Rue-leaved Whitlow-graſs.

THIS is a ſmall wild plant which appears early in the ſpring on the tops of old walls and low houſes; it is of a red colour, and does not grow above three or four inches high. The ſtalks are round, erect, and ſomewhat hairy; and they are covered with fat clammy matter, which makes them ſtick to the fingers in handling. The leaves are ſmall, and of the ſame colour as the ſtalks; they are each divided into three parts at the extremity, the middle diviſion being the longeſt. They are ſet on the ſtalks without regularity, and are thick, fat, and clammy in handling, like the ſtalks. The flowers, which grow at the tops of the branches, conſiſt each of five ſmall leaves, and are of a very bright white; they are ſucceeded by round full ſeed-veſſels, containing a number of very ſmall ſeeds; and as ſoon as theſe are ripened, the plant withers, and is not diſcoverable again till the ſucceeding ſpring.

The whole of this plant, freſh-gathered, is ſaid to be medicinal, and a ſtrong infuſion of it a very great ſweetener of the blood. It is recommended as an excellent remedy againſt every ſpecies of the ſcurvy, and the accounts of it's having cured the king's evil ſeem to be well atteſted. For this latter diſorder a ſyrup may be made of it's expreſſed juice, or a very ſtrong infuſion of it may be boiled to a ſyrup. A conſerve may alſo be made of the leaves, as we have directed for wood-ſorrel; indeed, it ſhould be preſerved for uſe in each of theſe ways, as the dried plant has very little virtue, and it can only be procured freſh during a very ſmall part of the year.

The White Willow.

THERE are many kinds of this very common tree which grow in watery places; but that which is uſed in medicine is the moſt common of all, and is diſtinguiſhed by being the largeſt, this ſort growing to be a tall tree. The bark is of a light aſh-colour, and rough upon the trunk, but more grey upon the branches; theſe ſhoot into many ſmall tough twigs, which are thick ſet with oblong narrow leaves, ſomewhat whitiſh, but particularly on the under ſides; they are placed irregularly on the branches, and are ſomewhat indented at the edges, but very finely, and pointed at the ends. The flowers appear very early in the ſpring, growing many together in the form of catkins. The ſeeds, which are ſmall, ſtand in the ſame catkins, incloſed in a fine white down.

The bark of the branches, dried, is ſaid to be a good aſtringent, and to reſtrain purgings, and the overflowings of the monthly diſcharges: the powder of it may either be given in any liquid to the amount of half a dram for a doſe, or it may be mixed into an electuary with any ſyrup.

Winter Green.

THIS plant grows wild in the woods in ſome parts of England, particularly the weſtern and northern counties, but is not very common. The ſtalk, which is about ten or twelve inches high, is round, large, and erect, and totally without leaves, all which ſpring immediately from the root, and are naked, broad, round, of a dark green colour, and a fleſhy ſubſtance, reſembling in figure thoſe of the pear-tree; they ſtand each on a ſeparate foot-ſtalk two or three inches long. The flowers, which ſtand one above another in looſe ſpikes on the tops of the ſtalks, are ſmall, of a gloſſy white, and each compoſed of five leaves; they are ſucceded by ſharp-pointed ſeed-veſſels full of very minute ſeeds. The root conſiſts of a quantity of ſtrong white fibres.

A ſtrong decoction of the leaves of this plant, with a piece of cinnamon in the boiling, and the addition of a fourth part of red wine, is given with ſucceſs to check the overflowings of the periodical diſcharges, bloody ſtools, and other internal hæmorrhages; it is alſo highly recommended for ulcers in the kidnies, bladder, or urinary paſſages, and bloody urine; and for inward wounds or bruiſes, which occaſion any diſcharge of blood.

Woad.

THIS plant is cultivated in many parts of England for the uſe of the dyers; and though it is commonly found in places near thoſe where it has been ſown, growing apparently wild, yet it is not properly a native of this country. It grows tall and upright, and makes a handſome figure; the ſtalk, which is round, large, ſtrong, erect, and upright, grows four feet high, but is, in general, ſo wholly covered with leaves, that ſcarce any part of it is viſible. Theſe leaves are of conſiderable length and breadth, large at the baſes, where they ſpring from the ſtems, without any foot-ſtalks, and narrower all the way to the extremities. They are of a green colour with a caſt of blue, and they fill the whole plant to the top, in ſuch a manner as to give it a rich appearance; the flowers, which are ſmall and yellow, ſtand in great numbers about the tops of the ſtalks, on a multitude of ſmall branches, into which the ſtalk is there divided: they are ſucceeded by little ſeed-veſſels, full of very ſmall ſeeds. The root is long and large.

Though this plant is chiefly cultivated for the uſe of the dyers, yet it's medicinal virtues demand great reſpect. The freſh tops of the ſtalks, before the flowers appear, are thought to contain the higheſt virtues, and an infuſion of theſe is excellent in removing obſtructions of the liver and ſpleen. It operates by urine, but the uſe of it muſt be continued a conſiderable time; diſorders which approach by ſlow degrees cannot be expected to yield to the firſt attacks of the moſt efficacious medicine.

Woodruffe.

THIS plant grows wild in woods and coppices in different parts of England; it ſeldom riſes above ten inches or a foot high. The ſtalk is ſquare, ſlender, but little branched; and ſo feeble, that it is not able to ſupport itſelf in an erect ſtate: many leaves ſtand at each joint, and encompaſs the ſtalk ſo as to produce the figure of a ſtar; they are of an oblong ſhape, broad, and of a dark green colour; in their form and growth they may be compared to the leaves of common clivers, only that theſe are larger, notwithſtanding the plant is ſo much leſs; and theſe are without the roughneſs which diſtinguiſhes the leaves of that plant. The flowers, which conſiſt each of one leaf cut into four parts at the edges, grow at the tops of the ſtalks in ſmall cluſters; they are of inconſiderable ſize, and white, and each of them is ſucceeded by two rough ſeeds, which ſtand together, and make a kind of globe. The roots are ſmall and fibrous, and creep very near the ſurface of the earth; a ſtrong decoction of the leaves, flowers and ſtalks, is eſteemed a good medicine to remove obſtructions of the liver, ſpleen, and gall-bladder; it is alſo eſteemed cordial and ſtomachic, and particularly uſeful in the jaundice and dropſy: the green leaves, bruiſed, were formerly applied to new wounds; but applications of this kind have been long diſuſed.

Treacle Wormſeed.

THIS is a diſtinct plant from that which produces the ſeed ſold in the druggiſts ſhops under the name of *wormſeed*: that is the production of a plant of eaſtern growth; but this is an Engliſh herb, very different in it's whole appearance from that, and all others of the ſame tribe. It riſes two feet high; the ſtalks are round, erect, ſtrong, and divided towards the top into ſeveral branches. The leaves, which are very numerous, ſtand on the ſtalks without regularity; they are long, broad at the baſes, but narrow-pointed at the extremities, and not indented about the edges: they are of a dull green colour. The flowers, which grow in ſmall cluſters at the ſummits of the branches, and about the upper parts of them, are ſmall, of a yellow colour, and compoſe a looſe ſpike; theſe flowers are ſucceeded by long ſlender pods, green at firſt, but changing to a kind of brown colour as they ripen; each of theſe contains a great number of round ſmall ſeeds, of a duſky colour, and of an extreme bitter taſte, even ſo as to exceed the bitterneſs of the common worm-ſeed.

This ſeed alſo is uſed medicinally, being bruiſed and mixed with any jelly of fruits, or with treacle; it is given to children of ſtrong conſtitutions, to deſtroy worms; it operates violently as a purge; and, if given in too large quantities, by vomit; and muſt therefore be uſed with great caution; though, under proper regulation, it will anſwer the purpoſe, and is preferable

able to mercurial medicines, which ought not on any occaſion to be adminiſtered, but under the direction of ſkilful perſons; in which number we do not include every practitioner of phyſic. Perhaps a proper inveſtigation of the virtues of the vegetable world might render conſtant application to medicines of this claſs leſs neceſſary.

Common Wormwood.

THIS plant is frequently found in lanes, and by way-ſides, in many parts of England. The root is large and woody, and the ſtem divided into many ſtalks, or branches, which are round, channelled, ſtrong, and of a light colour. The leaves are large and winged; they are divided into a number of ſmall parts, an odd one of which terminates each leaf. They are of a pale green above, but whitiſh or hoary underneath, and ſtand on the ſtalks without order; many of the ſame figure, but larger, ſpring from the root, and theſe continue green during the winter. The flowers grow in a kind of looſe ſpikes at the tops of the ſtalks; they are ſmall, yellowiſh, naked, and very numerous; each of them is ſucceeded by ſeveral very ſmall ſeeds. The whole plant is of ſo very bitter a taſte, that it is even proverbial.

A ſlight infuſion of the tops of the plant, freſh-gathered, is ſaid to be excellent for all diſorders of the ſtomach; to prevent ſickneſs after meals, create an appetite, and reſtore a loſt one; but if it be made ſtrong, it will not only be ſo unpalatable as to render it impoſſible to take it, but will alſo offend the ſtomach. The tops and flowers may be dried and powdered, and in this ſtate are recommended as a cure for agues; and act in the deſtruction of worms in the ſame manner as worm-ſeed, and are altogether as efficacious. The juice of thoſe large leaves of *wormwood*, which ſpring from the root before the ſtalk appears, is preſcribed as a remedy for the dropſy and jaundice, as it removes obſtructions, and works powerfully by urine.

Sea Wormwood.

THIS plant, which is commonly found in our ſalt marſhes, and about ditches where the tide flows, very much reſembles in appearance the common wormwood; but the diviſions of the leaves are much ſmaller, and the whole plant of an inferior ſize. The ſtalks are woody, ſtrong and erect, about eighteen inches high, and much branched. The leaves, as well as the branches, are whitiſh and hoary. The flowers ſtand in looſe ſpikes at the tops of the ſtalks, and are ſmall and naked, differing very little from thoſe of the common wormwood, except in ſize. The taſte of this plant, though bitter, is leſs diſagreeable than that of the common wormwood, and it has a more pleaſant and aromatic ſmell.

The tops may be uſed freſh-gathered, or the leaves and ſtems dried. It is ſometimes called *Roman wormwood* in the markets and ſhops, and is commonly uſed for the other, poſſeſſing the ſame general virtues; indeed, the two kinds already mentioned, and that which follows, have them in common; but the firſt, or common wormwood, is the moſt unpleaſant to the taſte, and diſagrees moſt with the ſtomach; and the three kinds have different degrees of excellence. This is better than the common, but is more diſagreeable than the true Roman wormwood. It acts as a ſtrengthener to the ſtomach, aſſiſts digeſtion, and diſcharges wind. It is commonly uſed as an ingredient in all bitter infuſions and tinctures, but is a good medicine of itſelf; and the infuſion of it, made by pouring boiling water upon it, letting it ſtand till it is cold, and then ſtraining it off, is an excellent medicine to create an appetite. It may be put into white wine, to which it communicates a pleaſant bitter flavour, and this is an agreeable way of taking it.

Roman Wormwood.

THIS is a more delicate plant of the wormwood kind than either of the former, and is a native of warmer climates, but is found in many gardens in England. It riſes to the height of two feet, or two and a half. The ſtalk is round, ſmooth, ſolid, erect, of a duſky brown colour, and inclined to woody. The leaves, which ſtand irregularly on the ſtalks, are ſmall and divided into many very fine parts, they are hoary both above and below, and except in this particular, reſemble more the leaves of the common ſouthernwood than thoſe of either of the other wormwoods. The flowers are ſmall, of a darker colour than thoſe of common wormwood, but much leſs; they are very numerous, and ſtand like thoſe of the other ſorts at the extremities of the ſtalks, in long and large ſpikes. The root is creeping, and ſpreads much, it is compoſed principally of fibres. Though the whole plant has a bitteriſh taſte, yet it is not like that of wormwood, being pleaſingly aromatic. The flowers are however leſs aromatic, and in ſmell as well as taſte more diſagreeable than the leaves.

The tops only are uſed freſh, but the whole plant dried. It is a gentle and admirable ſtomachic, but it has many other virtues; the juice of the freſh tops is eſteemed efficacious to remove obſtructions of the liver and ſpleen, and other inteſtinal parts, and it is ſaid to have, in many inſtances, cured the dropſy and jaundice without the aſſiſtance of any other medicine.

Yarrow.

THIS plant grows wild in our paſtures by way-ſides, and in almoſt every field. It riſes two or three feet high. The ſtalk is round, ſtrong, erect, and channelled. The leaves are long and narrow, they are winged and very beautifully divided, of a dark green colour, and the diviſions are extremely fine, ſlender, and arranged with great order. The flowers, each of which is compoſed of five little roundiſh leaves, ſtand at the tops of the branches in flat round and large cluſters; they are generally white, but are ſometimes tinged with a bluſh of red. The ſeeds, which are contained in a little ſcaly cup, are white and flattiſh. The root, which creeps immediately under the ſurface of the ground, is whitiſh.

The whole plant may be uſed when it is freſh-gathered, but the beſt parts are the tops of the ſhoots; theſe may be boiled in water, and the decoction being ſweetened with fine ſugar, is preſcribed to reſtrain the bleedings of the piles, bloody fluxes, and other internal hæmorrhages: it alſo checks the overflowings of the monthly diſcharges. It is reputed to be healing and ſerviceable in ulcers of the urinary paſſages, as it operates gently by urine.

General Obſervations on the Herbal.

HAVING given a deſcription of the ſeveral medicinal plants which are either found wild in any part of Great-Britain, or, having been imported from other parts of the world, are to be met with in gardens or plantations here; and having alſo enumerated their ſeveral virtues, and given general directions as to the application of them; it is now neceſſary to point out the forms of preparing and preſerving them for uſe, in the great variety of ways in which they may be advantageouſly adminiſtered in different maladies, and to mention ſome compoſitions in which vegetables are the only or principal ingredients. It will be extremely uſeful to thoſe whoſe reſidence is chiefly in the country, to be fully acquainted with all the beneficial purpoſes to which the various herbs and plants within their reach may be applied; but it is no leſs convenient, that they ſhould be informed of the means by which their virtues may be preſerved through the various ſeaſons of the year; and to theſe purpoſes we mean to dedicate this concluding part of our work, truſting that by this means our readers will be not only in poſſeſſion of a Compleat Britiſh Herbal, but of a very valuable body of domeſtic medicine, which may in moſt caſes be procured without expence, and preſcribed without danger.

From the foregoing herbal it will appear, that the leaves only of ſome plants are to be uſed; of ſome the whole plant cut from the root; the flowers, the fruits, or the ſeeds only of others; and again, that the roots of ſome plants are the parts which contain their chief or only virtues.

Of different trees, the barks, the woods, the excreſcences, and the roots are preſcribed, and of ſome a combination of two or more of theſe parts.

It will alſo be obſerved, that ſome vegetables are to be uſed freſh-gathered, and others dried, or preſerved; that in ſome inſtances the herb is held to be equally efficacious in both ways; in others, there is a preference, or even in one of the ſtates it may be wholly uſeleſs. It cannot therefore be improper to inveſtigate theſe matters fully, by way of giving a general idea, preparatory to the particular directions which are intended to follow.

Of moſt plants which are natives of this country, the ſtems and leaves die off in the winter, and only the root remains. In many others, the root periſhes alſo; and the propagation of the ſpecies is left to the fallen ſeeds, which are in ſuch caſes always ſcattered in ſufficient plenty, and light on ſuch ſoils as are ſuited to their particular growths; and it is generally obſervable, that the roots of thoſe plants which die wholly, ſeldom poſſeſs much medicinal virtue; and, on the contrary, the root which is permanent and laſting, producing new ſhoots every ſpring, is commonly endowed with valuable qualities. And this may alſo be conſidered as a general rule, that where little virtue is to be expected in the roots of annual plants, that deficiency is made up by their ſeeds; which, in thoſe inſtances, contain their beſt qualities.

From ſome of theſe plants, the roots of which outlive the winter, large leaves ariſe in early ſpring, before the appearance of a ſtalk; theſe are, in general, more replete with the particular virtues of the plant, than thoſe which afterwards grow on the ſtalk, being commonly larger and more juicy: there are alſo other plants which ſpring immediately from ſeeds dropped in autumn, at which ſeaſon they produce a root, and leaves which ſtand the winter; though the ſtalk does not riſe till the following ſpring. Theſe leaves, like thoſe which come from the roots of other plants in early ſpring, and before the ſtalks appear, are, in the ſame manner, preferable to thoſe which grow upon the ſtalks, deriving the full nouriſhment from the root; whereas, thoſe which ſpring afterwards participate only with the ſtalk and it's branches, and a large proportion is drawn off in the preparations made by nature for the continuance of the ſpecies, by the production of flowers and ſeeds. From hence it will appear, that when the leaves of any plant are recommended as the moſt proper parts for medicinal uſe, thoſe large ones which grow from the root, are to be taken in preference to thoſe which grow on the ſtalk; and, if poſſible, theſe ſhould be gathered at times when there are no ſtalks; becauſe they are then moſt full of juice, and have not been exhauſted of their virtues by the growth of the ſtalk, which certainly carries off a conſiderable portion of the nouriſhment from them; and that this is the caſe may be proved, by remarking that in ſome plants, although the leaves which ſpring from the roots were full of vigour before the ſtalk began to riſe; yet as that advances in growth, they wither and die away.

Thus, then, if the juice of the leaves of any plant is directed, it ſhould be expreſſed from theſe leaves, and, if poſſible, in this particular ſtate; and when they are to be uſed freſh in decoction, or infuſion, (proper directions having been given under every head when they are to be uſed freſh, and when dry) they ſhould be cut as near to the root as convenience will admit, and then ſhook, or bruſhed clean; for waſhing, in moſt caſes, deprives them of a portion of their virtue, and they ſhould be cut into the pot the moment they are gathered.

If the leaves only of any plant are to be dried, the ſame precautions ſhould be uſed in chuſing and gathering them; and the beſt way of drying them, is by ſpreading them upon the floor of a room, which ſhould be kept conſtantly open in dry weather, and they ſhould be turned two or three times a day; and when thoroughly dried, they ſhould be put into a box, or drawer, lined with paper, where they muſt be preſſed cloſe down, and covered with another ſheet of paper.

When the entire plant, except the root is required to be preſerved, much care is neceſſary that it be gathered in a proper ſeaſon. The whole growth of plants tends in a direct courſe to the production of their flowers and ſeeds, and when the latter are ripe, the other parts begin to fall into a decay; from whence it is obvious that the entire plant is in it's higheſt perfection, and moſt vigorous ſtate when the buds, or heads, are formed for flowering, but before any ſingle bloſſom is yet expanded; and this critical time ſhould be carefully attended to.

Such herbs as are to be uſed freſh, it is adviſeable not to cut up from the roots, but to take off the tops at lengths proportioned to the ſizes of the plants, and to the uſes for which they are intended; for decoction or infuſion they may be cut much lower than for conſerve, or the juice, for both which purpoſes they ſhould only be taken as low as they are perfectly freſh, brittle, and tender; indeed, the tops of plants gathered in this way are in all caſes much better for immediate uſe than the whole plant.

The weather and the ſeaſon is to be conſulted in gathering herbs for preſervation; the time moſt advantageous is after two or three days have paſſed without rain, and the hour, rather before noon, but when the morning dew is dried up; and theſe matters muſt be ſtrictly regarded, for if they are cut in damp weather, or whilſt the dew remains on them, they will not dry well; if, after a long drought, their juices will be exhauſted; and if, during the meridian power of the ſun, when the leaves flag, they do not poſſeſs all their virtues.

The herbs being thus carefully gathered, they muſt be looked over with attention, and all withered, decayed, or worm-eaten leaves, picked out, and any dead parts of the ſtalks cut away; they ſhould then be tied up in bunches of moderate ſize, for they do no not dry well in large bundles, and hung upon lines ſtretched acroſs a room with many windows; and, if poſſible, in different aſpects; and theſe, as well as the doors, are to be kept open in fair weather. The bunches ſhould not hang within a foot of each other, nor ſhould they be taken down till they are perfectly dry, when they ſhould be moved from the lines ſo tenderly as to avoid ſhaking them, and loſing the buds of the flowers, which are apt to fall off if the plants are roughly handled, and laid even in a drawer or box, in which they ſhould be preſſed down, and covered with ſheets of white paper; and being thus prepared, they are not only ready for infuſions or decoctions, but are much better for diſtillation than when they are perfectly freſh.

Of ſome particular plants the flowers are only or chiefly uſed, and though they are moſtly of value when they are freſh, yet there are many which retain their virtues dried; theſe muſt therefore be prepared for keeping in a particular manner.

Among theſe the flowers of lavender keep very well, and for that purpoſe they are to be ſtriped off the ſtalks with their cups or huſks, and ſpread all together upon the floor of a room covered with paper, and aired from ſeveral windows, where they ſhould be frequently turned till they are dry. The flowers of the plant which has been deſcribed under the name of ſtœchas, or French lavender, muſt be preſerved in the whole heads, which ſhould be cut off from the top of the ſtalk and dried in the ſame manner, but both ſorts are to be depoſited in boxes or drawers between papers, and care is even neceſſary that the paper is not damp.

When the flowers of roſemary are intended to be dried, they are cut from the ſhrub with a few of the leaves about them, it being a general and well-founded opinion, that the leaves retain more of the good qualities of the plant than the flowers. The cuſtom of drying the flowers of cowſlips, borage, and bugloſs, is pretty generally left off, it having been long known that they retain but a very ſmall part of their virtues in this ſtate; roſe-buds are however ſtill preſerved in this way, and are prepared for drying by cutting off the white parts; the full-blown flowers ſhould be treated in the ſame manner, but we muſt be underſtood to ſpeak of the red-roſe, the white is ſeldom dried.

Moſt other flowers uſed in medicine are beſt freſh, but as they are only to be had in that ſtate during a ſmall part of the year, and loſe their virtues by being dried, they muſt be preſerved in other forms, ſuch as ſyrups and conſerves; in the former way cloves, poppies, and many other flowers, are kept for uſe; and in the latter, cowſlips, the leaves of wood-ſorrel, and a great variety of leaves of different plants, which have been directed in the foregoing herbal to be preſerved by this means. Of the manner of making theſe ſyrups and conſerves, accounts have been given in different parts of this work, and further directions will be ſubjoined.

Fruits are alſo uſed in different ſtates and forms; for inſtance, a conſerve is made of hips, a jelly or preſerve of quinces, and ſyrups of mulberries, black currants, and a vaſt many other kinds. The fruits which appear in the forms of berries are generally dried, ſuch as juniper berries, bay berries, and the like, and for this purpoſe they are not to be ſuffered to ripen, but ſhould be gathered in their ripening, and ſpread abroad on a large table or floor, where they ſhould be turned till they are perfectly dry; but theſe directions apply to very few productions of our own growth, moſt of the dried fruits uſed in medicine being imported from other countries, and to be procured in the ſhops.

The ſeeds of plants which are uſed in medicine, are included in three different deſcriptions; thoſe which grow in naked heads or tufts, as thoſe of parſley, fennel, and the like; in pods, ſuch as muſtard, creſſes, and a thouſand other ſorts; or in fleſhy fruits, as quinces, melons, cucumbers and pomegranates: each of theſe kinds muſt be left upon the plant till it is perfectly ripe, when thoſe which grow in tufts or heads are to be ſhaken out upon the floor, thoſe in pods muſt be releaſed by a briſk ſtroke or two of the whole plant on the floor, which if they are ſufficiently ripe will diſlodge them. When the ſeeds are lodged in fruits they muſt be cut open, ſeparated from the wet matter and the membranes in which they are incloſed, and ſpread upon a table or floor in a dry and airy room, where they muſt be frequently turned, and as they grow dry rubbed between the hands, that they may not only be dry but clean, any of the juice or membranes which is left about them being apt to generate worms, which will deſtroy the ſeed.

The roots of plants are alſo to be uſed freſh in ſome inſtances and dry in others. The two kinds of briony, the arum or cuckow-pint, and ſome others, which are mentioned in different parts of the Herbal, loſe their virtues entirely by drying; in many others it is only retained in a very ſlight degree; and others, ſuch as the marſh-mallow and plants of that ſpecies, are equally efficacious, freſh and dried.

Thoſe which are deprived of their virtues by drying, may, in general, be kept in the earth, and be taken up as they are wanted. Thoſe which cannot be ſo preſerved, may be had for uſe at all ſeaſons, by expreſſing the juices in the ſpring or ſummer, and boiling them, or ſtrong decoctions, into ſyrups; or if they conſiſt of tender or pithy matter, it may be beaten into conſerves.

Roots for drying ſhould be collected in the very early part of the ſpring, when they are juſt about to ſhoot forth leaves; then, like plants that are juſt going to flower, they are full of rich and freſh juices, and poſſeſs all their virtues in the moſt eminent degree.

Having acquired a proper knowledge of the months, and even parts of them, in which the root to be preſerved firſt puts forth it's leaf; thoſe who are employed in this buſineſs muſt ſearch the ground for the firſt appearance of it, ſufficient to determine the plant with certainty. The roots muſt be then taken up and wiped clean, but not waſhed, nor ſhould they be wiped ſo roughly as to rub off any of the external ſkin, all that is neceſſary being to diveſt them of the adhering earth or dirt: this done, they muſt be prepared for drying according to their ſeveral natures; thoſe which are full of a mucilaginous juice, ſuch as marſh-mallow, the ſquill, and others of the ſame contexture, are to be cut acroſs into thin ſlices, and will dry to greateſt advantage laid upon a hair-cloth ſtretched over a frame, where they muſt be conſtantly turned and examined, that they are thoroughly dry before they are put by for keeping; if the leaſt juice or moiſture is left, they will become mouldy; but when they are perfectly dryed, they are not liable to this inconvenience. It ſhould be obſerved, that the moment a root becomes mouldy it loſes all it's virtues.

Thoſe roots whoſe juices evaporate more eaſily, and in which the virtue is lodged in ſome particular part of them, muſt, if the ſubſtance of the whole root is uniform, of courſe be prepared accordingly, till the virtue is equally diſperſed among all parts of them. And this kind of root, after cutting off the head, and the ſmall or thin part of it where it runs very taper, ſhould be ſplit lengthways into two equal parts, or if it is of conſiderable thickneſs, it may be quartered; this done, the divided parts are to be ſtrung upon a line, by drawing a needle threaded with a ſmall packthread through the largeſt part, and this line muſt be ſtretched acroſs a room, where they muſt be left to dry in the manner directed for herbs, the doors and windows being always kept open by day in good weather. But thoſe which are compoſed of different parts, ſuch as a ſort of thick rind, a fleſhy ſubſtance within that rind, and a hard woody or ſtony part in the middle, have all their virtues in the fleſhy ſubſtance, (the exterior rind or bark, and the hard inner ſubſtance, being deſtitute of any) and in this caſe the root is to be ſplit in length, as directed before, the hard woody part taken out and thrown away, and the remaining part ſtrung to dry in the manner laſt deſcribed. Roots which conſiſt principally of fibres are generally connected to a head; and however ſmall it may be, it will be adviſeable to ſplit it in two parts, and ſtring them up ſeparately for drying.

But few barks of trees are to be found in the catalogue of medicines of Britiſh growth, and of them moſt are directed to be uſed freſh;

yet

yet ſome there are which will preſerve and retain their virtues dried; and to prepare theſe for keeping, little more is required than to divide them into pieces of moderate ſize, and ſtring them up in the manner which has been directed with reſpect to roots; and theſe, when dry, are to be put up in the ſame way, and will keep for a conſiderable length of time, though as they grow old their virtues decreaſe by degrees; and for this reaſon, which extends alſo, though not exactly in the ſame degree, to roots, flowers, herbs, and leaves, they ſhould be renewed every year, which will be no very heavy burden, as the principal expence conſiſts in the trouble of gathering and preſerving them. And as ſoon as the freſh aſſortment is collected, the old one ſhould be thrown away, to prevent miſtakes and confuſion.

The room appropriated for laying up herbs, plants, flowers, and roots, to keep, ſhould be perfectly dry, and neither damp nor hot; and it ſhould, if poſſible, have two windows on oppoſite ſides, ſo as to admit a current of freſh air in dry weather; and here they ſhould now be frequently looked at, to ſee that they do not grow damp, mouldy, or muſty, or loſe their weight and virtue by too much heat. Vermin ſhould alſo be carefully looked after, which are apt to do much miſchief among ſuch collections.

There are but few medicinal woods of the growth of Great Britain; thoſe which are uſed ſhould be kept in the ſtem, or branch, and cut into ſhavings as they are wanted, for they ſoon loſe their virtues after they are ſeparated into ſmall parts.

The ſeveral excreſcences uſed, are the galls of the oak, and the burr upon the wild briar, and theſe require but little drying; a few days expoſure to the air upon a table, or in a ſhady window, will generally bring them to a fit ſtate for laying by, when they may be put up without danger, and preſerved a very conſiderable length of time. And the ſeveral kinds of fungus ſhould be gathered when they are full grown, and, according to their ſizes, either whole or cut into pieces, ſtrung upon a line, where they may dry by ſlow degrees; but particular care muſt be taken that they are very well dried before they are put by; they will otherwiſe grow mouldy in damp weather, and then they ceaſe to be of any manner of uſe.

We have already, in different parts of the Herbal, given directions for the adminiſtration of the ſeveral vegetable productions; but it will not be improper to offer general inſtructions for the moſt ſimple, eaſy, ready, and in many caſes moſt efficacious method of preparing them for uſe; which are confined to juices, infuſions, and decoctions; but theſe are to be procured and made in different ways, according to the nature of the particular plant.

Juices are to be expreſſed in ſome caſes from the whole plants, in ſome from the leaves, and in others from the roots; where the ſtalks are dry and ſapleſs, like the nettle, nothing can be procured from them, and they ſhould therefore be left out; in others, ſuch as water-creſſes, brook-lime, and the like, the ſtems are as full of juice as the leaves, and may be uſed with them; and whatever part or parts will yield the juice, muſt be well beaten in a marble mortar with a wooden peſtle; for metal may, in ſome caſes, communicate a quality to the herb which does not belong to it, and make it injurious inſtead of ſalutary.

To procure the juices of roots, they muſt be freſh out of the ground and thoroughly beaten, and the ſtringy, woody, or hard parts be taken out, as they ſerve in general to interrupt the reduction of the ſofter parts to ſuch a ſtate as may facilitate the extraction of the juices.

Such of theſe juices as are to be taken immediately, are ſometimes extremely unpalatable, and others are apt to lie cold upon the ſtomach, excite ſickneſs, or otherwiſe diſagree with it; but theſe inconveniences may frequently be corrected, and the virtues rather increaſed than leſſened.

If the freſh-drawn juice in it's thick ſtate is too coarſe for the patient's ſtomach, it may be permitted to ſtand till it ſettles and grows clear, or a ſmall quantity of it may be added in beating; in ſome caſes, and particularly with the juices of antiſcorbutics, the acid juices of lemons or Seville oranges may be added, with great advantage, not only to the flavour, but the effect.

In beating roots for the expreſſion of their juices, a little white wine may be added, both to facilitate the work, and procure the medicine a more certain and agreeable operation; the juice of ſome roots, and in particular of the flower-de-luce, will not in general ſtay upon the ſtomach, unleſs a little white wine hath been added in the bruiſing, when it ſeldom fails to ſettle, nor does it loſe any of it's effects on account of the mixture. The like addition to ſome of the colder herbs will be ſerviceable, and a little ſugar, and in ſome caſes a ſmall quantity of powdered ginger, may be added to the juice in preſſing, to ſecure it effectually from diſagreeing with the ſtomach; nor will it be leſs efficacious than if it had been bruiſed and preſſed alone.

But there are ſeaſons of the year when the freſh juices are not to be obtained, and then an infuſion of thoſe plants, which by being dried and preſerved according to the preceeding directions, retain a great part of their virtues, is to be ſubſtituted; and for this purpoſe the herb is to be cut to pieces, and boiling water poured upon it, which in ſome caſes extracts ſo much of it's qualities as to ſupply the place of freſh juice: indeed, the virtues are nearly the ſame in ſome plants, and even greater in others from the infuſion; though ſome loſe ſo much in drying that the infuſion is only to be uſed becauſe the freſh juice cannot be procured; and ſome again are efficacious in the dry ſtate, and in the form of infuſion, when the freſh juice would have been of little or no ſervice.

Herbs whoſe qualities are light, and their virtues eaſily extracted, are beſt taken in infuſions, the boiling water poured upon them extracting all their good qualities, none of which are loſt in the operation.

But other herbs, of a more thick and heavy ſubſtance, require to be boiled; and from theſe, in this way, are made decoctions: for as thoſe of a lighter kind would loſe their virtues by boiling, which would go off and evaporate in the ſteam; ſo the more ſubſtantial plants would not yield their beſt qualities without the proceſs of boiling. And this is fully exemplified, as to the lighter herbs, by diſtillation; the water obtained in this way being only the vapour of the boiled herb condenſed and caught by proper veſſels.

Thus, then, it appears, that ſome plants are by nature fitted for decoctions, and ſome for infuſions; nay, ſome plants which, if diſtilled, yield no virtue to the water, are fit for decoctions, in which way all their virtues will be extracted and retained: ſome herbs have ſo little juice, that it would be impoſſible to get it out by expreſſion; and the virtues of others lie in the huſks and buds, from whence no juice can be extracted; theſe can only be adminiſtered in infuſion, which extracts qualities that could by no other means be got at.

But there is a difference in the preparation of infuſions, which are either prepared in quantities to be drank cold, or are made and taken in the manner of tea, which is certainly the moſt adviſeable method, though the ſick are generally deterred from uſing them in this way, from the diſagreeableneſs of the taſte; the flavour of all herbs being much ſtronger hot than cold. Thoſe infuſions which are to be taken warm, are to be prepared in the manner of tea, and not ſuffered to ſtand longer; they may be drank with a moderate quantity of ſugar.

In order to make infuſions for frequent draughts, the herb, whether freſh or dried, is to be cut to pieces, and a ſtone jar, which covers cloſe, being got ready, and ſcalded out with hot water, the herb is to be put into it; and boiling water being then poured upon it till it is covered, the jar ſhould be cloſed, and it ſhould ſtand from four to twelve hours, according to the nature of the plant, after which it ſhould be poured off clear.

The quantity of the herb to be uſed muſt depend alſo on the nature of it, as well as the ſtate of the diſorder for which it is preſcribed; as a general rule, one ounce of dried herb is equal to two, or two and a half of freſh, though this is by no means infallible. And even in the applying theſe quantities the palate muſt be conſulted, as it muſt by no means be made diſagreeable, though it will be uſeleſs if it is not ſtrong enough to contain the virtues of the herb; and the due proportion for this purpoſe can only be aſcertained by repeated trials, as the ſame herb ſometimes contains it's good qualities in greater or leſſer degrees, according to the particular circumſtances of it's growth or preſervation.

But infuſions may, in many caſes, be made agreeable to the taſte, by additions which do not leſſen their efficacy; theſe may be, in ſome caſes, ſugar and a little white wine, to which, in other caſes, a mixture of the acid juices may be very proper, and both the wine and acid may, in putrid diſorders and ſlow fevers, be leſs ſparingly adminiſtered than in diſeaſes of an inflammatory nature.

Of the herbs which yield their virtues moſt conveniently by infuſion, may be reckoned moſt of thoſe which are pectoral and ſerviceable in coughs, and other complaints of the lungs; ſuch as colts-foot, ground-ivy, and the like. Thoſe which, being light and aromatic, are recommended in nervous diſorders, are baulm, mother of thyme, and ſeveral others, which may be noticed in the Herbal. And moſt of the bitter herbs are beſt taken in infuſion; and boiling water poured upon the different kinds of wormwood, gentian root, or orange peel, makes an admirable bitter, being only ſuffered to ſtand till the liquor is cold, and then poured off for uſe; but decoctions of either of theſe ingredients would prove extremely diſagreeable to the taſte, and probably inefficacious. If it ſhould be found neceſſary to give any purgative quality to theſe bitter infuſions, a little freſh polypody root will anſwer that purpoſe, without making the liquor unpalatable.

Nor is the infuſion of this root alone inefficacious as a ſafe and gentle purge, any more than the infuſions of purging flax, and many other vegetables; but to that of the plant laſt-mentioned, or of ſenna, a little orange or lemon juice may be added, which takes off every thing diſagreeable in the taſte, and renders it a pleaſing beverage, inſtead of a nauſeous medicine.

To anſwer the end of infuſions upon thoſe plants whoſe firm textures refuſe to yield their good qualities to the mere pouring on of boiling water, decoctions have been invented; and in preparing theſe the ingredients are to be boiled in the water; and though all the parts of different plants require this operation in order to extract their virtues, yet, in general, leaves, flowers, and entire plants, freſh and dried, are uſed in infuſions; and the roots of plants, and the barks of trees and ſhrubs, in decoctions.

To prepare decoctions in the moſt ſafe and prudential way, an earthen pipkin, with a cloſe cover, ſhould be procured; for as all vegetables contain certain portions of ſalt and acid, the decoction may take a tincture from the metal; and it is as improper to boil herbs in a copper pan as to beat them in a metal mortar, a practice againſt which we have already given a caution.

Decoctions may either be prepared from freſh roots, or from thoſe which have been dried, and the barks of trees and ſhrubs may, in like manner, be uſed in either ſtate. When they are uſed freſh, the roots ſhould be cut into thin ſlices, and the barks and woods into thin ſhavings; but when they are to be made from leaves or entire plants, they need only be groſsly cut. If the roots or barks are to be uſed dry, they ſhould be bruiſed or pounded to pieces; and dry herbs and flowers are generally ſo criſp and brittle, that they are ſufficiently divided in thruſting them into the veſſel. If theſe laſt-mentioned ingredients are to be uſed in the ſame decoction with the former, they ſhould be added toward the end of the boiling.

When you intend to make a decoction which is not immediately wanted for uſe, let the ingredients ſtand in the water ſome hours before it is ſet on the fire; it ſhould then be heated very gradually, and the boiling ſhould be as gentle as poſſible; the length of time neceſſary to extract the virtues muſt be proportioned to the nature of the ingredients; a quarter of an hour's boiling is ſufficient in general, but ſometimes it is neceſſary to increaſe that time; and when this is compleated, the liquor is to be ſtrained off while it continues hot, and the herbs or other ingredients preſſed hard; and this liquor is to be ſet by to ſettle; and when it is thoroughly cold, it ſhould be poured off clear from the ſediment, which always ſubſides as it cools, and it may be ſweetened with ſugar for uſe; or white-wine may be added, as to the infuſions, according to circumſtances.

But few ſimple waters are at preſent uſed in medicine, though they were formerly very numerous; and as few families are without an alembic or ſtill, thoſe which are neceſſary and uſeful may be made with no other expence than the fire and attendance

Mint-water, peppermint-water, and pennyroyal water, are beſt made of the dried herbs; three pounds weight of either of theſe herbs, in this ſtate, is to be put into the ſtill, with four gallons of water, and the quantity of two gallons is to be diſtilled off.

Milk-water may be made as follows.

Take three quarters of a pound of ſpearmint, or common garden-mint; half a pound of rue; four ounces of Roman wormwood; and four ounces of the leaves of angelica; put theſe into the ſtill with ten quarts of water, and draw off ſix. This is uſeful in fevers, and to prepare juleps.

To make a water which anſwers the purpoſe of a compound ſpirituous water.

Put into your ſtill at night one pound of Jamaica pepper, with three gallons of fair water; draw off two gallons from it the next morning.

Cordial ſpirituous waters are at preſent very little in uſe: thoſe, however, who chuſe to keep ſome of theſe preparations by them, may make them as follows.

To make cinnamon water.

Put into the ſtill a pound of cinnamon bruiſed, a gallon of ſpirits, and a gallon of water; let it ſtand twelve hours, then diſtill off one gallon.

To make ſpirituous milk-water.

Take two pounds of freſh garden-mint, one pound of angelica, and half a pound of Roman wormwood, both likewiſe freſh; to theſe add two gallons of ſpirits, and the like quantity of water; draw off two gallons, and add to it, when diſtilled, a quart of ſtrong vinegar. This is uſed as a ſweat in colds occaſioned by damp, and in rheumatic complaints.

To make ſtrong penny-royal water.

Take three pounds of dry penny-royal, two gallons of ſpirit, and three gallons of water; from this quantity two gallons may be drawn. This is adminiſtered in hyſteric complaints, and to promote the periodical diſcharges.

To make anniſeed water.

Take a pound and half of anniſeeds, a pound and half of angelica ſeeds, three gallons of ſpirits, and ſix quarts of water; diſtill three gallons. This is a good medicine for the windy colic.

To make lavender water.

Take two pounds of freſh lavender flowers, two gallons of molaſſes ſpirits, and one gallon of water, and draw off five quarts.

To make Hungary water.

Take three pounds of roſemary flowers, with the tops; two gallons of ſpirits, and two gallons of water. From theſe ingredients diſtill five quarts.

To make ſpirit of lavender.

Take three quarts of lavender water, and one of Hungary water; add one ounce of cinnamon, one ounce of nutmegs, and ſix drams of red ſaunders wood. Shake theſe ingredients, and let them ſtand together till the ſpirit has taken a good colour; then pour or ſtrain it off fine.

Many tinctures are uſeful, and it would not be amiſs to keep them, of all the roots and barks which are preſcribed in the courſe of this work to be taken in a dry ſtate; for tinctures will contain more or leſs of their virtues, and may be found uſeful where the powder or decoction cannot be adminiſtered; and as the ſeveral medicinal roots and barks have been already enumerated, it is not neceſſary to repeat them, as a tincture may be made from either or any of them, by one general rule.

Take one ounce of the root or bark, and, according to it's nature, cut or bruiſe it to pieces; let it infuſe twelve or fourteen days in a place moderately warm, ſhaking it frequently till the laſt twenty-four hours, when it muſt be left to ſettle, and then poured or ſtrained off fine, and bottled for uſe.

But there are ſome other tinctures which are compoſed partly of foreign ingredients, and ſome even wholly; which, as they are eaſily prepared, and generally uſeful, it may not be improper to mention in this place.

Tincture of caſtor.

Take one ounce of caſtor, and one pint of ſpirit; infuſe, and ſtrain off as above directed. This is eſteemed an anti-hyſteric medicine.

Tincture of ſoot.

Take one ounce of wood-ſoot, and half an ounce of aſſafœtida; infuſe as above in a pint of ſpirit, and ſtrain or pour it off fine. This is ſaid to be an excellent remedy in epileptic fits.

Tincture of ſteel.

Infuſe two ounces of flowers of iron in a pint of ſpirit; this may be very eaſily poured off fine. This medicine is preſcribed to reſtrain the overflowing of female periodical evacuations.

Conſerves may be made of rue, mint, ſcurvy-graſs, wood-ſorrel, Roman wormwood, and a variety of other plants; of roſes, roſemary, and many other flowers; and of hips, ſloes, oranges, and other fruits. From thoſe plants which have ſtiff or woody ſtalks the leaves are to be picked off and beat up with three times the weight of ſugar. The tops of the young ſhoots of ſuch plants as are juicy and tender may be cut off as far as they are quite brittle, and beaten up with a like quantity of ſugar.

Conſerves of the flowers of roſemary, mallows, archangel, and lavender, may be made in the ſame manner as conſerves of leaves or young ſhoots; and to make conſerve of red-roſes, the buds muſt be picked from the huſks, and the white bottoms cut off; and then a conſerve may be made from them in the ſame way, as it may alſo of cowſlip flowers, and of thoſe of many other plants mentioned in the foregoing Herbal.

To make the outer rinds of Seville oranges and lemons into a conſerve, they muſt be firſt beaten into a pulp; and then the ſugar is to be added, and they are to be beaten afreſh.

To make conſerve of hips, they are not to be gathered till they are fully ripe, after which they are to be laid by in a dampiſh place till they are perfectly ſoft; they are then to be ſpread upon the back of a large hair ſieve; and a diſh being placed under it, they muſt be broke with the hand, or a peſtle of wood, and rubbed over the ſieve till all the pulp is forced through the hair-cloth, and the ſeeds and ſkins only remain. This pulp being weighed, twice the weight of loaf-ſugar powdered is to be added, and the whole beat together in a mortar.

To make conſerve of ſloes, they muſt be gathered when they are ripe, but before they are ſhrivelled; and they are to be ſet over a fire in a kettle of water, till they ſwell and are ſoftened; but care muſt be taken that the ſkin do not burſt: they are then to be laid upon a ſieve, and the ſame proceſs purſued as for making the conſerve of hips, only that three times the weight of ſugar is neceſſary to be beat with this pulp to make a conſerve.

A ſyrup may be formed from a vaſt variety of vegetables and fruits; and the liquor, of which it is to be made, may be the juice of herbs or fruits, or a decoction or infuſion of the former; but which ever it is, it ſhould ſtand till it is perfectly clear; in which ſtate it ſhould be poured off, and three pounds and a half of loaf-ſugar, firſt powdered, muſt be added, and the ſugar and liquor together put into an earthen pan, which muſt be placed in a larger veſſel, with ſuch a quantity of water as may not endanger it's getting into the ſyrup and ſet over the fire, where it muſt remain till the ſugar is perfectly diſſolved. During the time it is diſſolving, the ſcum muſt be carefully taken off as long as any riſes; and as ſoon as it is cold, it may be bottled for uſe, and will keep the year through, without becoming candied or fermenting.

To make ſyrup of cloves, take one pound and half of clove July-flowers, picked from the huſks, and the white heels cut off; pour upon them one quart and half a pint of boiling water: let them ſtand twelve hours; then pour off the clear liquor, and, following the above directions, make it into a ſyrup. In the ſame manner ſyrup of violets and red poppies may be made; but a ſmaller proportion of the violet flowers will anſwer the purpoſe, and ſome addition muſt be made to the quantity of the poppies. In the like way ſyrups may be made of damaſk roſes, peach bloſſoms, cowſlip flowers, and all the other flowers which have been recommended in the Herbal to be preſerved for uſe in this way.

To make ſyrup of buckthorn, the juice muſt be boiled down to half the original quantity, with a ſmall addition of cinnamon, ginger, and nutmeg; and when the quantity is thus reduced, it muſt be boiled again with the ſugar.

For ſyrups of lemon and orange juice, mulberries, and other juicy fruits, a pound and half of ſugar is required to every pint of the clear juice, which is to be melted as before directed.

Syrups may be made of garlick, leeks, orange-peel, lemon-peel, and of various herbs, by preparing ſtrong infuſions of thoſe ingredients in the manner already ordered, with the quantity of ſugar firſt-mentioned, which muſt be added to them after they have ſtood till they are perfectly fine, and the liquor is poured off from them in that ſtate.

Syrup of marſh-mallows, poppy-heads, and others of the like kind, may be made in the ſame manner, with the ſtrongeſt decoctions that can poſſibly be procured from thoſe ingredients, and the proportion of ſugar allotted to infuſions.

To make ſyrup of ſaffron, a ſtrong tincture is firſt to be procured by infuſing two ounces of ſaffron in a quart of Mountain; and this being ſtrained off, may be made into a ſyrup with the ſame quantity of ſugar.

A particular kind of ſyrups, under the name of honeys, in the compoſition of which honey was uſed inſtead of ſugar, and ſome to which vinegar was added, with which addition they paſſed by the name of oxymels, were formerly in much uſe; but they are not now in great reputation, at leaſt not above two or three ſorts of each.

Among theſe, honey of roſes is the moſt common, which may be made in the following manner: cut the white heels from any quantity of red roſe-buds, and lay them to dry in a ſhady place, where there is a free current of air; when they are properly dried, put a pound of them into a ſtone jar, and pour on them three quarts of boiling-water, ſtir them well with the water after they have ſtood twelve hours, preſs off the liquor and let it ſettle, then pour it off fine, and add to it ten pounds of honey, boil it till it is of the conſiſtence of a thick ſyrup, when it is fit to be laid by for uſe. In the ſame manner may be made the honey of any flower, or (with the expreſſed juice) of any plant. Oxymels are alſo made in the following manner; and ſome few of them are ſo uſeful, that it may be convenient to keep them in a family.

To make oxymel of garlic, put a pint of vinegar into an earthen pipkin, with half an ounce of carraway ſeeds, and the like quantity of ſweet fennel ſeeds; after it has boiled ſome time, add three ounces of freſh garlic root, ſliced; after this addition, it muſt boil a minute or two longer, when it muſt be covered up, and when cold the liquor is to be preſſed out, and a pound and a quarter of honey being put to it, it muſt be boiled to a conſiſtence.

Oxymel of ſquills is made as follows: Infuſe ſix ounces of dried ſquills for three days in a quart of vinegar, then preſs out the vinegar, let it ſtand to ſettle, and pour it off fine; afterwards add to the liquor three pounds of honey, and boil it to a conſiſtence.

To theſe may be added the ſimple oxymel, which is made of a quart of vinegar and four pounds of honey, boiled together to the conſiſtence of a common ſyrup.

Vegetable oils are made by infuſion of herbs and flowers in common oil. Theſe are alſo very eaſily prepared: one or two preſcriptions will be ſufficient to direct the making of all the others.

To make oil of St. John's wort, half a pound of the flowers of common St. John's wort are to be picked clean, and two quarts of olive oil being poured on them, the whole muſt be ſtirred together, and ſuffered to ſtand till the oil takes a reddiſh colour, when it is to be preſſed off. To make oil of elder, a pound of elder flowers are to be put into a quart of olive oil; which is to be boiled till the flowers are criſp, when the oil is to be ſtrained off.

The common green oil is made by bruiſing in a marble mortar ſix ounces of green camomile, with the like quantity of bay-leaves, ſea wormwood, rue, and ſweet marjoram; theſe herbs are to be boiled in a quart of olive oil till they are criſp, when the oil is to be poured off, and when cold bottled for uſe.

The virtues of theſe oils are mentioned under the ſeveral herbs which are the principal ingredients of them; and after one or other of theſe methods, may be made oil of any plant, or of any number of plants.

Having thus pointed out the ſeveral forms in which the virtues of the vegetable world may be preſerved for uſe, and recommended the moſt advantageous methods of adminiſtering them, it remains to aſcertain, as nearly as poſſible, the quantities of each compoſition, which may be given with ſafety, and the hope of ſucceſs. But it muſt be obſerved, that theſe directions can never be offered with preciſion, but muſt be varied according to the violence of the diſeaſe, and the age, habit, and conſtitution of the patient; and that the following rules muſt only be conſidered as general ones, to be followed when more particular preſcriptions are not found under the head of the diſeaſe which the medicine is intended to relieve.

The ſtrength of infuſions and decoctions is to be regulated by the taſte; for as they are intended to be ſwallowed in conſiderable quantities, if they are made ſo ſtrong as to be very unpalatable, that end will be defeated: yet they may be rendered leſs diſagreeable by a moderate quantity of ſugar, though they are apt to pall the ſtomach if they are too highly ſweetened; ſo that about an ounce to a quart is generally ſufficient. We have already mentioned the addition of wine and acids in particular caſes.

The doſe of either decoction or infuſion may be, in general, about half a pint, unleſs they are deſigned to purge or vomit; in which caſes the quantity muſt be proportioned to the exigency of the occaſion and the ſituation of the patient.

Of ſimple waters, half the quantity, or about a quarter of a pint, will be ſufficient; and of the cordial or ſpirituous waters, leſs than half that quantity: the latter may, in particular caſes, be given alone; but they are principally intended to be mixed with other ingredients of leſs ſtrength.

Tinctures are to be adminiſtered in drops, and from ten to an hundred may be a doſe, according to their natures and ſtrength; which, as well as the particular circumſtances of the patient, are to be conſulted. As a general doſe, five and twenty drops may be conſidered as proper for a man of middle age and tolerable conſtitution; theſe are alſo ſometimes given alone, but are much more ſerviceable in mixtures than in this way.

A julep may be compoſed of ſix ounces of one of the ſimple waters, two ounces of one of the ſpirituous waters, two drams of a ſyrup, and fifty drops of a tincture: theſe are the proper proportions for mixture; but this quantity may make two or more doſes, according to the caſe.

A draught is only a julep of leſs quantity, with more powerful ingredients added to them; and the proper doſe will conſiſt of an ounce and a half of a ſimple water, three drams of a ſtrong water, one dram of a ſyrup, and forty drops of a tincture; but to theſe may be added a medicine of ſome power to increaſe the virtue. The waters, tinctures, or ſyrups, to be uſed, will be determined by the caſe itſelf, and by referring to the Herbal.

To make a bolus of any vegetable root or bark reduced to powder, a ſcruple, or half a dram, is generally ſufficient, which is to be made into a ſort of paſte with ſyrup. Medicines in this form were formerly covered with leaf-gold; but if any covering is neceſſary, wafer-paper is the moſt innocent.

Electuaries may be made of powders, conſerves, and ſyrups: they differ from boluſes, as well in that the ſize is inferior, as that the doſe is ſmaller, although the piece taken be as large; which is owing to the admixture of conſerve, which poſſeſſes, in general, little virtue in compariſon with the other ingredients. This form is moſt convenient for medicines that are to be taken for a length of time; and in the adminiſtration of which, preciſion, as to quantity, is not ſo very material.

An electuary againſt an habitual looſeneſs, when it exceeds all reaſonable bounds, and threatens to become dangerous, may be made by mixing an ounce of conſerve of red-roſes, and ſix drams of ſyrup of cloves; and to theſe may be added two drams of powdered biſtort root, one dram of powdered tormentil, and half a dram of toaſted rhubarb; and of this electuary a quantity equal to the ſize of a nutmeg may be taken once in two days, which will gently check the number of ſtools, without putting an immediate ſtop to the uſual, and, perhaps, neceſſary looſeneſs. This is alſo a pleaſant medicine; and it's efficacy may be increaſed by giving a draught of tincture of roſes after every doſe of this electuary.

One obſervation ſtill remains to be made. Opiates and anodynes to compoſe the ſick to reſt, and to abate the violence of pain, are frequently neceſſary; but as they are the moſt powerful, and in ſome meaſure the moſt dangerous medicines, which thoſe who do not poſſeſs medical ſkill can venture to adminiſter; ſo the manner of uſing them ſhould be attended to with the utmoſt attention and circumſpection.

Beſides opium, and liquid laudanum, which is a preparation of that drug, there are ſeveral different preparations mentioned in the foregoing Herbal, which may anſwer the ſame purpoſe: among theſe, a ſyrup made of the juice of the wild lettuce is an excellent medicine. The ſyrup of diacodium, which is made of the ſtrong decoction of poppy-heads, is ſomewhat more efficacious than this, if a quieting doſe ſtill more powerful than the other is required.

We have now furniſhed our readers with an Herbal, containing, we apprehend, all, or far the greater part of the herbs of the natural growth of Great-Britain; or which, having been imported from other countries, are to be found in gardens, plantations, or hot-houſes, which are known to contain any particular medicinal virtues; and we have added ſuch deſcriptions to each plant, as will enable them to diſtinguiſh the different kinds with preciſion. To this we have annexed the methods of preſerving the leaves, roots, and flowers of each, and the ſeveral forms in which they may be adminiſtered; together with the various preparations of them in infuſions, decoctions, conſerves, jellies, ſyrups, and powders; and the compoſition of them in juleps, draughts, boluſes, and electuaries. We have alſo ſubjoined preſcriptions for the quantities and doſes, with as great a degree of accuracy as the variation of different caſes will admit; and we truſt we have now compleatly performed our engagement, to make our readers perfectly acquainted with the value and efficacy of Britiſh ſimples; and that they will find themſelves poſſeſſed of ſuch information, as will enable them to apply the produce of their own country with certainty, ſafety, and ſucceſs.

ADDENDA.

ADDENDA.

Authenticated extraordinary Caſes in Phyſic and Surgery.

CASE I.

Of a Diſeaſe occaſioned by ſwallowing Stones.

ONE Thomas Gobſill, a lean man, aged about twenty-ſix or twenty-ſeven years, being for three years extremely tortured with wind, was adviſed to ſwallow round white pebbles, which he did as often as the fit returned; and the ſtones paſſing eaſily through him, he thereby found great relief. But, ſome months after, being ſeized with a violent fit, he ſwallowed, as uſual, about nine ſtones; which not paſſing, he repeated the doſe till he had taken above two hundred. Theſe ſtones had been lodged in his body above two years and a half, when he firſt applied to a phyſician; and then he complained that his appetite was gone, that he could digeſt nothing, but threw up every thing he eat. Upon examining his belly, the phyſician found the ſtones lay almoſt as low as the *os pubis*, or bone immediately over the private parts; and thruſting his fingers juſt above that bone, ſo that the lower part of the belly might lie on his hand, he could, with the motion of it, ſhake and make them rattle as if they had been in a bag. Upon this he cauſed a ladder to be ſet againſt a wall, and hung the patient up by the hams, with his head downwards. When he was in this poſture, he ſaid the ſtones were got up to his ſtomach; but being ſet down upon his feet, in a very ſhort time the ſtones were plainly heard to drop down one after another.

When his body was bound, he vomited all he eat and drank; to prevent which, he commonly kept it open with whey. As he lay a-bed, the ſtones would ſometimes get up, as the patient expreſſed it, almoſt to his heart, and give him great uneaſineſs; and at ſuch times he was obliged to get up upon his knees, or ſtand upright, and then he could hear them drop; and he always reckoned above one hundred. He was ſo diſabled by theſe ſtones, that he could not work but with pain; and then he felt the ſame at night, and next day a great ſoreneſs in the bottom of his belly, and voided large quantities of blood by ſtool. He had been under the hands of ſeveral quacks; ſome had vomited him with *ſtibium*, and purged him; others purged and clyſtered him; but all the medicines they made uſe of could never bring one ſtone from him.

After ſome time, he told the phyſician that the pebble-ſtones grew more troubleſome to him; that of late he had vomited up two of them, which were weighed, and one of them found to be two drams; and the other one dram, two ſcruples and a half. The patient complained that his ſtrength was of late much decreaſed; that he voided great quantities of blood by ſtool, which kept him very weak. His appetite was alſo very much impaired, and his ſtomach would ſcarce retain any thing. His hands were paralytic, always extremely cold, and his fingers contracted; ſo that he was not able to open them without help, nor could he keep them open unleſs it was by force. His legs were very likely in a ſhort time to be as uſeleſs to him as his hands; for he ſaid they began to fail him, and in the ſame manner to grow cold, and have little feeling in them. But the moſt remarkable of all his complaints was, a new progreſs the ſtones had either found or made.

Formerly at night, in bed, they uſed to get up, as hath been mentioned, to his heart; and upon turning to his knees, or ſtanding upright upon his legs, they would drop one by one, ſo diſtinctly, that they might be counted; and in this ſtate they always aroſe ſtraight up on the right ſide of his breaſt: but now they roſe obliquely, and got under his right arm, inclining towards the ſhoulder-blade; and when they were in this place, by giving him a blow with the fiſt on his right ſhoulder, they would all fall down in a lump together, and might very plainly be heard to claſh on the other ſtones, which lay, as they did formerly, juſt above the *os pubis*. He at laſt died ſuddenly.

CASE II.

Of a Plum-Stone remaining Thirty Years in the Guts.

SARAH SWAYN, of a thin habit and middle ſtature, when but ſix years old, was firſt afflicted with a violent pain, together with a large, hard ſwelling, on the left ſide of her belly, which laſted twelve hours, and then went off without the uſe of any remedy or ſenſible evacuation; and, at the end of three months, it returned, continued, and went off as before. It obſerved that period for ſeveral years, and then it changed it's intermiſſion from three months to three weeks, and continued ſo till ſhe was thirty-five years old; in which time ſhe married, and bore one child, the pain of which ſhe averred to be much leſs than what theſe paroxyſms gave her. During her pregnancy, neither her pains nor her intermiſſions had any alteration; and, in her whole life, ſhe found no diet diſturbed her, but milk and ſalt meats. About nine months before ſhe was cured, the pain increaſed, and the tumour became as big as a man's two fiſts. She had endeavoured to get eaſe by ſeveral remedies, but all in vain, till her agony and watchings had weakened her ſo, that ſhe could not riſe out of her bed. In this condition ſhe was adviſed by a woman to take a doſe of powdered jalap; it operated violently, and ſuddenly drove the pain from her ſide down to the fundament, where it reſembled a teneſmus, or a conſtant and violent inclination to ſtool, without being able to force any thing off; and, after ſhe had been thus afflicted for four days, a ſuppreſſion of urine came on; and, two days after that, a ſurgeon was called: he perceived, by the account given him, that ſomething obſtructed the paſſage of her fæces, and he ſoon found it ſo by a probe. He then anointed the paſſage with an unctuous ointment; and, taking hold of the ſubſtance with a pair of large forceps, he extracted it. Abundance of wind and fæces guſhed out, and continued to flow till her guts were emptied of all the matter which had been ſo long retained therein; after which he ordered her an anodyne olyſter and a compoſing draught; and for ſeveral years after ſhe continued well. The ſubſtance extracted was round, ſomewhat oblong, having ſome ſuch impreſſions on it as men's fingers make on wax or plaiſter; it weighed ten drachms at the time of extraction, but afterwards ſcarcely an ounce. It was five inches in circumference. Although it felt rocky, and otherwiſe appeared like a ſtone, yet it ſwam on water. Upon cutting it in two with a knife, to view the inſide, it appeared externally black and ſmooth, as if it had been varniſhed; nor was this coat thicker than one of varniſh. Next to this was a cruſty ſubſtance like brick, as thick as a half crown: within that appeared a ſubſtance reſembling paſte-board; and within that lay a prune, or withered plum, with the ſtone and kernel cut aſunder with the knife. Thus all theſe ſurpriſing ſymptoms, which ſo long afflicted this patient, were occaſioned by ſwallowing this plum-ſtone ſo many years before.

CASE III.

Of a Sleeper.

ELIZABETH ORVIN, born at St. Gilain, in Auſtrian Flanders, of a healthy, robuſt conſtitution, had ſerved the curate of that place for many years very faithfully, till the beginning of 1738; when ſhe became very ſullen, uneaſy, and ſo rude and churliſh, that the neighbours ſaid ſhe was loſing her ſenſes. Towards the month of Auguſt, ſhe fell into an extraordinary ſleep, which laſted four days; during which time ſhe took no manner of nouriſhment, neither was it poſſible to rouze her. She awakened at laſt of herſelf, in a very ill humour, which did not, however, hinder her from following her buſineſs as before, for ſix or ſeven days, when ſhe fell into a profound ſleep again, which laſted only eighteen hours, after which ſhe awakened, and from that time continued to ſleep ſeventeen or eighteen hours a-day; that is to ſay, from about three o'clock in the morning till eight or nine at night, except four months in the year 1745, when ſhe had a natural ſleep; and twenty-one days in the year 1748, when a tertian fever kept her ſo far awake, that ſhe did not ſleep above two hours at once. It was commonly believed that the day-light had ſome influence upon her, becauſe ſhe could not be awakened in the day-time. A phyſician from Bruſſels, who went to ſee her, with Mr. Preſto, ſurgeon-major of a regiment, were admitted to her room about five o'clock in the evening. He felt her pulſe, and found it natural: having raiſed her arm, he obſerved it to be very ſtiff and heavy, and had a good deal of difficulty to bend it; when it was let go, it fell like a piece of heavy wood. Her head was then raiſed, and with it her back and ſhoulders; for her neck was as ſtiff as a board, and her legs were in the ſame ſtate. He put his mouth to her ear, and called as loud as he could, but was unable to wake her; that there might be no cheat in the matter, he thruſt a pin through her ſkin and fleſh to the bone, kept the flame of burning paper to her cheek till the ſcarf-ſkin was burnt, put volatile ſpirits and ſalts into her noſe, and thruſt a little linen, dipped in rectified ſpirit of wine, into her noſtril, and kindled it for a moment; all this was done without his being able to obſerve the leaſt change in her countenance, or ſigns of feeling. The ſurface of her body was warm, and in a gentle perſpiration. At half an hour paſt ſix o'clock, her neck, arms, and legs, were more ſupple than at his arrival, which he attributed to her drawing nearer the time of her awakening. About eight ſhe turned in her bed, got up abruptly, and came to the fire. The phyſician then aſked her ſeveral queſtions, to which ſhe gave ſour anſwers; appeared gloomy and ſad, and repeated often, that ſhe would rather be out of the world than in ſuch a ſtate. He could get no ſatisfactory account from her about her ſickneſs; all that he could learn from her was, that ſhe felt a heavineſs in her head, which ſhe knew to be the fore-runner of her diſorder, and which determined her to go to bed, where ſhe lay, without once turning, from the time ſhe lay down till her ſleep was over, and had, during that time, no ſort of evacuation, except by perſpiration. She told the phyſician ſhe was formerly regular as to her diſcharges, but could not well remember when or how they left her. He ſaw her eat with an appetite, and begin to ſpin, and then quitted her; but coming back the next morning, found her in the ſame ſtate of ſleep and ſtiffneſs as at his firſt arrival. He then made new efforts to rouze her, but in vain; the ſucceſs was ſtill the ſame. The woman that ſhe lived with ſaid they uſed to give her ſome nouriſhment through a funnel when the ſleep was remarkably long; upon which information, her mouth was opened, and four ſpoonfull of milk poured into it, which ſhe ſwallowed; and he obſerved the action of the throat, though a ſpontaneous or voluntary motion, to be regular, and the deglutition natural. The ſurgeon of the place acquainted the phyſician, that he had given her ſeveral large doſes of tartar emetic, one of which conſiſted of eighteen grains, without being able to awake her. He alſo mentioned ſeveral methods that were uſed ſome years ago to rouze her, ſuch as her being whipped till the blood ran down her ſhoulders; her having her back rubbed with honey; and being expoſed in a hot day before a hive of bees, where ſhe was ſtung to ſuch a degree, that her back and ſhoulders were full of little lumps or tumours. At other times they thruſt pins under her nails, together with ſome other experiments equally cruel and indecent. The medical relater of this caſe was alſo aſſured, that the roaring of the cannon, during the ſiege of the fortreſs in the place where ſhe reſided, in 1746, never awakened her, nor interrupted her ſleep. This poor woman, at the time of giving this account, March 1753, was fifty-five years of age, of a pale colour, and not very lean; ſhe never at this time ſaw day-light, but ſlept out the longeſt day in ſummer; and in winter began to ſleep ſeveral hours before day, and did not awake till two or three hours after ſun-ſet. During her ſleep, ſhe had a natural warmth all over her body, with an extraordinary tenſion or ſtiffneſs of her limbs, as well as her neck, joined with a total abolition of all manner of ſenſibility; which would ſeem incredible, if the affair had not been examined into with the greateſt exactneſs.

CASE IV.

Of a fractured Skull.

SOME ſlates falling from the roof of a houſe, four ſtories high, upon the head of a girl about 13 years of age, broke and ſhattered her ſkull, at the place where the ſagittal and coronal ſutures meet, making a depreſſion of the bone of about four inches diameter. The common ſymptoms attended this accident, an univerſal dullneſs, bleeding at the noſe, difficulty of breathing, with a full, irregular pulſe. Twelve ounces of blood were immediately taken from her arm; and a number of phyſicians and ſurgeons being aſſembled, they agreed to trepan her directly, which was performed. Upon endeavouring to raiſe the depreſſed pieces of bone, they were all found ſeparated from the neighbouring ſound bone, and therefore were all brought away, and ſo left a terrible chaſm in the ſkull. The membrane which incloſed the brain was covered with a pledget dipped in honey of roſes, with a little tincture of myrrh. Pledgets, wet in the tincture, were applied to the ſkull, and the other common dreſſings were put on. The patient being laid in bed, an emollient clyſter was injected, and procured two plentiful ſtools; and before night ſhe recovered the uſe of her tongue, and all the other parts of her body, except the left-arm, which continued in a paralytic ſtate for eight days.

She was kept on a low diet, and the cure went very ſucceſsfully on, and was compleated ſo far in three months, that the teguments were healed.

On the fifth day after her wound, a plate of lead had been made for covering all the dreſſings, which kept on all the time ſhe was under the care of the ſurgeon; with two pieces of broad tape, put through four holes, one on each ſide of the plate before, and the other two behind, tying the ends under the lower jaw and behind the head.

Notwithſtanding the wound being ſkinned over, the ſurgeon recommended the conſtant uſe of the plate of lead, laid over a compreſs upon the ſcar, to ſupply the want of bone, and ſhe kept it on two months after he left off viſiting her; but then, thinking herſelf ſecure, ſhe laid it aſide, and continued well ſeven months more, when the hooping-cough, then epidemick in the place, ſeized her; and was ſo violent one night, when ſhe was in bed, that the ſcar in her head was burſt open, and the brain was puſhed out at the teguments. The ſurgeon being inſtantly called for, found above two ounces of the brain lying on the ſcalp: after cleanſing this away, he applied dreſſings, with the plate of lead over them, thereby preventing a greater diſcharge of the brain. The ſymptoms that followed this dire accident were an entire paralyſis of the limbs, the patient retaining ſtill the uſe of her reaſon and tongue, but being much inclined to ſleep, with a low, depreſſed pulſe, and palpitation of the heart; and her urine was diſcharged involuntarily. In this condition ſhe continued five days, and then died.

CASE V.

Of the ſame.

A Gentleman, on his return home late one evening, was attacked by one of his houſe-dogs as he was getting off his horſe. In his own defence, he drew one of his piſtols, and fired; but unluckily the barrel burſt, and drove the lock from the ſtock, ſo as to ſtrike him on the upper part of the forehead. A ſurgeon was ſent for, who treated the wound as a common contuſion for five or ſix days; at the expiration of which, another was called in, who found the patient in a heavy drowſineſs; and was informed by his friends, that for two days he had laid in that ſtate, which was accompanied with ſudden twitchings and grinding of his teeth at times; his pulſe was full, but irregular, and his extremities were very cold. Having awaked him, the ſurgeon laſt called in aſked how he found himſelf; he ſaid, that his head and eyes were painful, and then dropt aſleep. On rouzing him again, the eye oppoſite to the wounded ſide appeared to be dim; he ſaid, he could not diſcern thoſe about him; and in a moment he fell aſleep again. Theſe ſymptoms occaſioned ſuſpicions that the brain was injured, and the ſurgeon laſt called thought it prudent to ſend immediately for the family ſurgeon; who being come, the dreſſings were taken off, on which a viſible fracture appeared, with the bones forced inwards; and the pulſation of the membrane which covers the brain was ſeen very high and ſtrong. The patient being ſcalped, the trephine was applied, the depreſſed pieces of bone raiſed, and a ſplinter which had pierced the membranes of the brain removed: he was dreſſed in the uſual manner; afterwards a clyſter was injected, and ſome blood taken from his arm. The next day and the following his drowſineſs continued, notwithſtanding he had been bled twice. On removing the bandage and dreſſings, a black ſpeck was diſcovered under the meninges of the brain, nearly the ſize of a ſilver penny. A lance being introduced, a drop of matter flowed out, on which the membranes were dilated with the probe-ſciſſars, which let out near a tea-ſpoonful of matter; and the ſurgeon, with his forceps, took out the piece of the patient's hat which had been drove through the bones by the force of the upper part of the hammer of the lock, which was exactly of the ſame ſhape. Next day his drowſy ſymptoms abated; and after three or four days, they went off entirely. The cure was finiſhed in the uſual time, after ſeveral bleedings and a low diet.

CASE VI.

A Concuſſion of the Brain, without a Fracture, occaſioned by a Blow with a blunt Weapon.

A Perſon having received a blow on the left temple, with a ſmall contuſed wound, it was dreſſed as ſuch by the perſon who uſually attended the family, and treated as a common wound. The ſecond or third day a fever enſued, with violent pains of the head, watchings, ravings, loſs of ſenſe, and other ſymptoms which accompany fractures of the ſkull. Another ſurgeon being called in about the fourth day, examined the patient, but could not diſcover with the probe, nor otherwiſe, any roughneſs or aſperity of the bone; however, as the ſymptoms were violent, he removed the ſcalp, and the membrane which immediately covers the bone, by a thorough inciſion through it, though it was ſound, and adhered firmly to the bone; but even then he could diſcover neither fracture, fiſſure, or depreſſion, although he had gently wiped the bare bone with lint and water. He now dreſſed it with dry lint on the bone, over which he placed a digeſtive, and ſecured them by the ſimple kerchief bandage. Twelve ounces of blood were drawn from the patient's arm, and a clyſter was afterwards thrown up. Next day the ſymptoms were greatly alleviated; however, more blood was taken away, and the clyſter repeated, which in a few hours abated his complaints. Every ſymptom on the fourth or fifth day diſappeared; the wound had a good digeſtion, and he was believed to be out of danger; accordingly, the ſurgeon who had been laſt called in took his leave, committing him to the care of the family-apothecary. But it was not many days before he was again called in, the ſymptoms being returned and increaſed; for now he was afflicted with a ſleepineſs, and faultering in his ſpeech; his words alſo were inarticulate: theſe ſymptoms, and his lethargic condition, induced the medical attendants to apprehend, that there muſt be a fiſſure, and that it had eſcaped their notice; they therefore made uſe of the rugine, and ſcraped the bone till the blood appeared; but even then no fiſſure could be found. The wound was dreſſed as before, and the patient was again let blood. The next day he was ſeized with a paralyſis of his right eye-lid, which in a few hours cloſed; his right-arm, ſide, thigh, and leg, became ſtiff; and ſoon after, his belly became hard, and almoſt without motion; and clyſters, though of the moſt ſtimulating quality, had no effect. It being now evident that a concuſſion of the brain was the cauſe of the complaints, the trepan was applied, and the bone was taken out; on which ſome extravaſated blood appeared on the ſurface of the membrane, which did not adhere to the ſkull internally. On examining the piece of bone, it was ſound, though at firſt it was apprehended to be cracked; for an impreſſion of a capillary branch of this membrane had, on a curſory view, the reſemblance of a ſmall fiſſure, which had almoſt led the ſurgeons into a miſtake; however, the ſymptoms abated ſome time after the performance of the operation.

The meninges of the brain, on removing the firſt dreſſings, puſhed up through the aperture of the bone; which appearance led the medical aſſiſtants to imagine that ſome blood or pus was retained; and, on making a perforation with a lancet, ſome bloody matter flowed; the wound was then dilated, and the brain unloaded of a conſiderable quantity of matter.

The cure was finiſhed in ſix weeks from the operation; the man became hearty, and followed the hard labours of the field without farther inconvenience.

CASE VII.

Diſlocation of the Under Jaw.

A Servant of Lord W——'s met with an accident at the Windmill Inn, at Salt Hill, in attempting to gird his horſe tight, and hawling the ſtraps by the force of his teeth, a method uſual amongſt common fellows. A ſurgeon of the neighbourhood was ſent for, who, after examining the caſe, declared the man to be ſeized with a palſy in the jaw; or, according to the vulgar idea, that he was planet-ſtruck. The poor fellow could not ſpeak to be underſtood, nor ſwallow any thing without great difficulty; but made a noiſe, and ſhook his head, to ſignify that the opinion given was wrong. Some cried out that the diſorder proceeded from drunkenneſs; and various were the opinions of the by-ſtanders on ſo ſudden a change in a man who was well but a minute before. As his diſorder was not diſcovered, his lord ordered him to ſet out for Reading; and the people of the town through which he paſſed were ſurpriſed to ſee a man with his mouth wide open, his tongue ſwelled, dribbling and groaning as he paſſed along, and his face and head enlarged to a great degree. On his arrival at Reading, a ſurgeon was ſent for to the inn; and examining the caſe, found that he had diſlocated his jaws on each ſide, and that they muſt be reduced: to effect which, the ſurgeon's aſſiſtant was placed behind the patient, bringing his hands over his forehead, to make a counter-extenſion; whilſt the ſurgeon himſelf, with his thumbs on the hindermoſt teeth on both ſides, preſſed the jaw downwards, and at the ſame time pulled forward, by which counter-actions the lockers of the jaw were reſtored with a little noiſe, and ſome injury to the ſurgeon's thumb. The ſervant immediately leaped off the chair, and kneeled down, giving him a hundred bleſſings, in as diſtinct words as before the accident. He was, however, directed not to talk till the parts were recovered. Some blood was taken from his arm; and the next morning he ſet out for Bath with his lord, being only enjoined to keep on the muffler, and to live upon ſpoon-meats for a fortnight at leaſt.

CASE VIII.

Of a Locked Jaw.

A Middle-aged man, of a healthy, robuſt conſtitution, by trade a bricklayer, happened, on the 12th of April 1754, when at his work, to tread upon a large nail; which entering between the two laſt, or outer metatarſal bones, penetrated almoſt through the foot.

The day following (April 13) he was taken to St. George's Hoſpital; where his foot being much ſwelled, and very painful, he was blooded; the wound likewiſe was a little dilated, and a bit of ſtocking, which the nail had carried in with it, extracted: after which he continued eaſy, the wound looked well, and except a cough, which came on about the 18th, and was ſuppoſed to proceed from cold, nothing remarkable happened till the morning of the 26th of April, when he complained of a ſtiffneſs in the lower jaw, and at the ſame time a dry, huſky cough, with a ſtinging pain, as he expreſſed it, in his breaſt, ſtriking through to his back.

His pulſe being quick, full, and ſtrong, about 12 ounces of blood were immediately taken away; and being coſtive, he took an opening mixture. In the evening a bliſter was ordered between his ſhoulders; and for his cough, a mixture of oil of ſweet almonds and ſpirits of hartſhorn; and, at bed-time, a pill of two grains of opium.

He had but a reſtleſs night, ſleeping little; and next morning (April 27) the jaw was cloſer and more rigid, but the other ſymptoms were much as the day before. The opening mixture having done little, a clyſter was ordered; and after it's operation, he was directed to take half a ſcruple of pure muſk, in common julep, every three or four hours, for as yet he could receive and ſwallow liquids.

The morning of the 28th, there appeared little or no variation in any of the ſymptoms; the muſk ſeemed to have heated him greatly, and he was therefore preſcribed ſmall broths and gruels, as plentifully as the diſtemper would allow them to be given; and the muſk was ordered to be continued.

He had a very reſtleſs night; and in the morning (April 29) complained much of his cough, pains in his breaſt and back, and of gripings in his bowels; and now the jaw was ſo faſt locked, that he could hardly get down any nouriſhment at all. He moreover complained of a pain and difficulty in making water; which, as he had for years been a little ſubject to the gravel, was at firſt thought to proceed from that cauſe.

As he had now taken the muſk for two days, in which time the diſtemper had evidently gained ground, it was not thought adviſeable to continue it; he was therefore immediately ordered to loſe nine ounces of blood (the pulſe being quick and full;) after which, on account of the coſtiveneſs, a purging clyſter was given, which procured two or three motions; and in the evening he took a pill of two grains of pure opium, to be repeated every three hours.

The fore-part of the night he was reſtleſs; but towards morning (April 30) ſlumbered a little; and by eleven he had taken in all ten grains of opium: he could now open the jaws ſo far as to get down thin gruels, though with difficulty; his cough likewiſe, and pains, ſeemed a little abated. He was ordered through the day a little broth or panada, as he could take them; and in the evening to go on with the opium, as the day before. He ſlept between two and three hours; and in the morning (May 1) had only taken three pills, that is, ſix grains of opium. The jaw appeared much as the day before; the pains were eaſier; his cough and ſtrangury much the ſame; but his pulſe was quick and hurried; and he complained much of heat and cough, had a thick raſh, and was the whole day very reſtleſs and uneaſy.

In theſe circumſtances it was thought beſt to diſcontinue the opium for that night, and to order him, for nouriſhment, broths and thin gruels; and for his difficulty of urine, barley-water, with gum-arabic diſſolved in it; and in the evening (he being ſtill coſtive) a laxative clyſter: in the night he was very reſtleſs; and the next day (May 2) he was evidently much worſe; the jaw was cloſer and more rigid than the day before; his pains were violent, but now more in the lower belly, ſhooting upwards, as he deſcribed them, into the ſtomach, breaſt, and back; his pulſe was much hurried, and the raſh ſtill out.

In this unfavourable proſpect, the benefit he ſeemed to receive from opium, April 30, and the return of the bad ſymptoms, after diſcontinuing it the 1ſt of May, induced the phyſician who attended him to make a farther trial of that medicine: he was therefore ordered one grain of opium every hour, and accordingly began it about noon; and as his pains were remarkably violent in the lower belly, a clyſter, with about half an ounce of wild valerian root powdered, was ordered in the evening.

His nouriſhment was this day the ſame as before, but he could get down very little. This night he had in all about two hours ſleep; and in the morning (May 3) he ſeemed almoſt in every reſpect better; he could open his jaw a little more; his cough was eaſier, as were the pains of his ſtomach, breaſt, and back; but in the lower belly they were ſtill violent. The retention of urine was troubleſome; the raſh ſtill out, though not ſo florid; and the pulſe quick.

He was ordered one grain of pure opium immediately, and to be repeated every two hours. In the night he had between two and three hours ſleep; and next day, May the 4th, he ſeemed a good deal better; he could open the jaw a little farther, ſo that he now took liquids pretty eaſily. His pulſe was much the ſame as before; the raſh ſeemed going off; the ſtrangury was leſs troubleſome; but he ſtill complained much of pains in the lower belly.

He was ordered to keep to the ſame nouriſhment and drinks; to take one grain of pure opium every ſix hours only; and in the evening to have the valerian clyſter repeated.

The morning of the 5th a general amendment of the ſymptoms appeared; he had taken three grains of opium, and had ſlept between two and three hours; he complained moſtly of pains in the lower belly, with coſtiveneſs, for which he was ordered a purging clyſter in the evening, with a conſiderable quantity of liquid laudanum. The raſh appeared to be going off; and two grains of opium, with five grains of aſafœtida, were directed to be given at bed-time.

This day, May the 6th, his cough and pains in the breaſt were returned; he had ſlumbered but little in the night; the jaw was much as the two preceding days: as he could now take things with a ſpoon pretty eaſily, he was ordered a mixture of ſpermaceti, volatile ſalt of hartſhorn, and elixir paregoric; two ſpoonfuls to be taken when the cough was troubleſome, or the pains violent; at the ſame time he was directed to take two grains of opium immediately, and to repeat it at bed-time, and at five or ſix in the morning.

He had a quieter night; and next morning, May the 7th, the jaw was ſenſibly freer than the day before, and he ſeemed every way better, only the pains in the lower belly were ſtill troubleſome: the ſpermaceti mixture had diſagreed with his ſtomach; he continued coſtive; and, indeed, from the beginning, he had no ſtools but what were procured by purging phyſic, or clyſters.

He was this evening ordered a purging clyſter with valerian root; and a pill of two grains of opium to be taken going to reſt, and repeated in the morning.

May the 8th, all the ſymptoms looked more favourable; and, for the firſt time, a remarkable alteration for the better was perceived in his pulſe: as, therefore, he could now take things, whether food or medicine, pretty eaſily, (yet the jaw ſeemed to mend but ſlowly) it was judged adviſeable to try the antiſpaſmodics; accordingly, half a dram of wild valerian root powdered, was ordered, with the camphire julep, three times a day; and two grains of opium at bed-time.

In the night he ſlumbered but little: however, the next morning, May the 9th, the pains were much abated; he now made water freely, and his pulſe was quieter; but ſtill the jaw was much confined in it's motion; beſides, in moving it, he complained of a pain at the articulation: for this, two ſmall bliſters were applied behind the ears, and a pill of two grains of opium given at bed-time.

The night of the 9th was the firſt in which he could be ſaid to have had tolerable reſt; he ſlept five hours; and the next day, May the 10th, he had, for the firſt time, a natural ſtool. He had now evidently both a better pulſe, and a much greater opening and flexibility in the jaw: from this day, therefore, the chief attention was to his diet; however, the antiſpaſmodics were continued for two or three days longer. A laxative mixture was directed to be taken occaſionally, and a pill of two grains of opium at bed-time.

The 13th he eat a bit of pudding and chewed a bit of bread for the firſt time.

The 14th, 15th, &c. he continued gaining ground, though ſlowly; but being very anxious to return to his family, he was permitted to become an out-patient the 22d of May, although even then the jaw was not ſo free and flexible as it ought to be.

When out of the hoſpital, he continued to take, every night, an opiate pill, ſometimes of one, and ſometimes of two grains, till Friday, June the 7th, when he left off all medicine; and on the Wedneſday following, June the 12th, came to the hoſpital, and returned thanks for his cure. In the ſpace of twenty-two days he took about ninety grains of opium.

CASE IX.

Of Convulſions occaſioned by Wind in the Stomach and Bowels.

A Woman, aged 41, was ſeized with convulſive twitchings on the left ſide, accompanied with a moſt acute pain under the ſhort ribs, ſhooting towards the region of the ſtomach. Theſe fits continued from half an hour to three hours at each attack, coming on mildly at their commencement, but increaſing in violence and pain to ſuch exceſs as to excite convulſions through the whole day; under which the patient appeared to ſuffer the moſt excruciating torture, till at length (nature being exhauſted) ſhe ſunk into a ſtate of ſtupefaction, and in a ſhort ſpace of time regained her uſual ſtrength. In ſome of theſe fits, a ſpontaneous vomiting enſued, which terminated them ſooner, but no particular matter was ejected.

Theſe convulſions ſometimes occurred two or three times a day; at other times ſhe enjoyed a week's reſpite; but during the intervals between them, her health conſtantly returned: ſo that her life conſiſted of viciſſitudes of perfect health and painful diſeaſe.

Her periodical evacuations had not ceaſed, though they had diminiſhed in quantity; and her countenance had a freſhneſs and colour, denoting healthineſs and vigour.

Beſides laxative remedies, ſhe had tried bleeding, camphire, volatiles, bliſters, bark, acids, alkalies, flowers of zinc, and foetids in various forms, agreeable to the directions of phyſicians at home and abroad, but without benefit.

From the frequent eructations of wind ſhe paſſed, joined with the other ſymptoms, it was apprehended that flatulence in the ſtomach and bowels principally excited this dreadful diſeaſe; and that, beſides opiates to quiet the convulſive motions, it was neceſſary to abſorb the ſuperabundant air, which ſeemed detached into theſe internals, and ſometimes extended them ſenſibly to the touch.

As the ſpontaneous vomiting always contracted the duration and violence of the fits, ſhe was ordered to take an emetic draught every week.

And alſo four ounces of lime-water to be drank three times a day, in order to abſorb the fixed air which might be let looſe from the aliment, and accumulated in the inteſtines.

For the ſame purpoſe, and likewiſe as an antacid, two drams of calcined magneſia were recommended three times a day, and one dram of the paregoric elixir was adminiſtered once a day at leaſt.

Diet of eaſy digeſtion, and the leaſt flatulent, was at the ſame time adviſed.

The firſt week ſhe experienced eaſe.

This excited perſeverance; the fits gradually diminiſhed in violence and frequency; and in the ſpace of two months, nearly ſubſided, at which time the elixir was omitted.

She continued to take calcined magneſia and lime-water for a week afterwards; after which her health appeared to be reſtored and uninterrupted, without the uſe of any medicine.

CASE

CASE X.

Of Rheumatic convulſive Pains about the Loins.

A Perſon about 35 years of age, robuſt, and of a bilious conſtitution, had his pores cloſed up, perhaps by a ſudden cold caught after hard labour. As ſoon as he was taken ill, he became feveriſh, having firſt a ſhivering cold fit, and next a hot fit, with wandering pains at one time in the ſtomach and inteſtines, and at another time in the breaſt; but theſe ſymptoms were ſoon changed into others. The morbific matter was lodged all in the patient's back, occaſioning ſuch violent pains from the loins downwards, that great drops of ſweat run down his hair and face, ſo that he could not lie in his bed, ſit, or ſtand; and the only poſture that ſeemed to give him any relief from the pains in his loins was compreſſing his belly againſt the bedſtead; though he could not continue eaſy for any time even in that poſture; for being ſeized with convulſions, he would raiſe himſelf up with a diſtorted mouth and frightful countenance, and then fall back upon the ground (unleſs ſome perſon was at hand to prevent it) where he lay for dead, not being able to move himſelf, and having no more ſtrength to get up than a child. At which time his arms and legs became ſo ſtiff, that they could neither be drawn up, nor ſtretched out. His mouth was convulſed in ſuch a manner, that a ſpoon could hardly enter it: the convulſions in his back and limbs returned by fits, which were not periodical, but at one time ſooner, at another time later, according to the greater or leſs violence of his pain. This poor patient at one time lay againſt the bedſtead for about three weeks, never lying down on the bed; and during all this time had little ſleep, but remained in the moſt exquiſite agonies, with frequent convulſions. Theſe were the ſymptoms of the diſorder, the patient being otherwiſe in a good ſtate of health. He had no inclination to vomit; his pulſe was ſtrong and equal; his tongue was moiſt, covered with a whitiſh pellicle; the blood taken from him looked like that in pleuritic caſes, his urine like that of perſons in health. This was the patient's ſituation when a phyſician was called in, who was at firſt at a loſs what courſe to take: however, in the firſt week, the patient was once blooded, had a clyſter; and a purge adminiſtered to him, together with a large quantity of laudanum; but all to no purpoſe. At length, after the phyſician had ſeen him in the miſery above deſcribed, he ordered the bleeding to be repeated to a pretty large quantity. The next day he preſcribed a gentle purge; which giving the patient three or four ſtools, he could walk upright without any pain or convulſions. But the operation was no ſooner over, than both theſe ſymptoms immediately returned, and the patient to his accuſtomed poſture againſt the bedſtead; yet ſome hopes were entertained that repeating the purge might effect the cure, as the firſt doſe had given ſome reſpite. The following day reſin of jalap and ſweet mercury were adminiſtered, but it did not anſwer, for the patient had not one ſtool, though two ounces of ſyrup of buckthorn had been added; on which account the doſe was increaſed by adding every day alternately three or four ounces of the ſyrup of buckthorn. At length by this means his belly was kept open, the pain abated, and the convulſions did not return ſo frequently as before. The patient was now permitted to drink as much whey as he pleaſed; and ſince theſe purging medicines had operated on the patient, laudanum could be more freely and ſafely preſcribed, to procure reſt to the ſpirits, agitated both by the diſorder and the phyſic. Thus, at length, by repeating the purge eight or ten times, the pain was quite gone, the convulſions ceaſed, and the patient was pretty well recovered. In the mean time, to prevent a relapſe, medicines proper in nervous diſorders were applied, to invigorate the blood and ſpirits. The patient's legs ſwelled as he recovered; but the tumor was ſoon diſcuſſed by the application of the laſt-mentioned medicines, and he ſoon regained his ſtrength ſo as to return to his labour.

CASE XI.

Of a ruminating Man.

THIS ruminating man lived at Briſtol; he would begin to chew his meat over again within a quarter of an hour after his meals, if he drank upon them; if not, it was ſome time longer. This chewing after a full meal laſted about an hour and an half; if he went to bed preſently after meals, he could not ſleep till the uſual time was over. The victuals, upon their return, taſted ſomewhat more pleaſant than at firſt. Bread, meat, cheeſe and drink, ſeemed to retain much of the ſame colour they would be of were they mixed together in a mortar. Liquids, as broth and ſpoon-meat, returned to his mouth the ſame as dry and ſolid food. The victuals ſeemed to the patient to lie heavy in the lower part of his throat, until they had undergone the ſecond chewing; afterwards they would paſs clean away; and he always obſerved, that if he eat variety of things, what he ſwallowed firſt would again come up firſt to be chewed. If this faculty intermitted at any time, it portended ſickneſs, and he never was well till it returned again. The patient was always thus affected ſince he could remember. His father ſometimes chewed his cud, but in ſmall quantities, and nothing like his ſon.

CASE XII.

A ſudden and exceſſive ſwelling of a Woman's Breaſt.

ELIZABETH TREVERS, aged 23 or 24, of a fair complexion, and of a healthy conſtitution, was, on July 3, 1669, in good health, and ſlept well that night; but in the morning when ſhe awaked, and attempted to turn herſelf in the bed, her breaſts were ſwelled to ſuch a degree, and became ſo heavy, that ſhe could not ſtir; yet without any pain or weakneſs in her breaſts, or any other part. A phyſician being called, adviſed the uſe of an emollient warm fomentation; and once he gave a bolus, which operated ten times downwards, and the ſwelling abated a little; yet ſhe was ſo weakened by it for two or three days after, that he durſt not attempt to repeat it; but on account of the ſuppreſſion of the monthly diſcharges, he preſcribed ſome diuretic and opening medicine. The tubuli, or pipes of the breaſt, were very hard; and indeed the whole breaſts ſeemed to be nothing more than thoſe tubuli, and with little or nothing of wind or water. The left breaſt weighed, as near as could be gueſſed, about 35 pounds, but the right ſomewhat leſs; and the ſkin of the back, neck, and belly, ſeemed to be drawn towards the breaſt, to ſerve for increaſing the diſtenſion. The circumference of the right breaſt was two feet ſeven inches; of the left, three feet one inch and a half; the length of the right breaſt from the collar-bone, one foot five inches and a half; the length of the left breaſt one foot ſeven inches and a half; the breadth of the right breaſt one foot one inch; and that of the left one foot four inches and a half.

About the beginning of September ſhe coughed up, at ſeveral times, ſome blood, but this was ſoon taken off; and at that time there appeared ſeveral ulcers in the ſkin of her breaſts, and other parts, eſpecially a great many on the pudenda; which laſt were cured, but thoſe in her breaſts remained in part, and diſcharged a great deal of matter, by only applying colewort leaves. She complained of grievous pains in her joints, eſpecially on the ſhin-bones.

She died October 21; and the next morning, cutting off her left breaſt, it weighed 64 pounds weight; and on opening it there was found neither water, cancerous humour, nor any other thing more than it's extraordinary bulk. The tubuli and fleſh were white and ſolid, and exhibited no different appearance from the ſoundeſt breaſts of women, or udders of other animals. This woman had loſt her ſtomach, and could not ſleep for ſeveral weeks before ſhe complained much of her breaſts from their great diſtenſion, and her whole body was exceedingly emaciated. The breadth of her two breaſts was three feet two inches and an half; their circumference, lengthways, four feet four inches; and the circumference of the breadth three feet four inches and an half. The right breaſt was not cut off, but it was ſuppoſed to weigh 40 pounds.

CASE XIII.

Of Stones in the Bulb of the Urethra.

A Young man, about 19 years of age, had laboured under a ſuppreſſion of urine for ſeveral days without relief; and was attended by an eminent apothecary and ſurgeon, who had attempted ineffectually to draw off the water. On calling in another ſurgeon, he found a tumor near as big as a ſmall pullet's egg, on the interior part of the root of the penis, on the left ſide; which ſeemed to run downwards near the bulbous part of the urethra, or neck of the bladder. The urinary paſſage was ſo greatly diſtended, that it was very viſible, and to be felt above the baſon of the pubes; and the ſurgeon obſerved the veſtiges of a former wound in that part which is cut in the high operation for the ſtone, which the patient ſaid was made when he was about four years of age, at which time a very large ſtone had been extracted from him. On examining the ſwelling, ſome hard bodies might be both heard and felt, which were apprehended to be ſtones; and that either the cavernous part of the urethra, the membranous coats of the neck of the bladder, or the bladder itſelf, had ſuffered a violent extenſion by the long and continual obſtruction of urine, and that therefore the only method for relief was opening the tumour: accordingly, a lancet was thruſt in, from which followed near three pints of urine, of a very offenſive ſmell, and of different colours, with ſome ſmall gravel; the wound was then dilated downwards, and the director, which is uſed for cutting in the lateral method, was introduced; on which a ſmall pair of extracting forceps were guided into the neck of the bladder, and upwards of 60 fine ſmooth ſtones taken away, ſome of which were as large as common nutmegs. The ſcoop was afterwards introduced, which paſſed very eaſily, (as it was ſuppoſed) by it's length into the bladder, and drew out ſome very ſmall ſtones, about the ſize of rape-ſeed; theſe alſo were as ſmooth as China-ware, and poliſhed to the higheſt perfection, but of different ſhapes.

The wound was dreſſed at firſt like thoſe of the common ulcer-kind, and the proper precautions were obſerved. The next day fomentations, with the uſual dreſſings after the operations for the ſtone, were applied. It was near forty hours before any conſiderable quantity of urine came through the wound, which might be occaſioned by a ſlight inflammation, contracting or cloſing the internal lips of the neck of the bladder, ſince, doubtleſs, they ſuffered ſomewhat by the introduction of the forceps and director. Afterwards the water, and with it now and then a ſmall ſtone, continued it's paſſage this way for near three weeks, which made it neceſſary to dreſs twice a-day. This difficulty was got over by good compreſſes and bandages, and the water began about this time to take it's natural channel. Something of this kind was neceſſary to prevent the danger of leaving a fiſtulous, incurable ulcer: and becauſe there was alſo ſome hazard of the external wound healing before the internal parts of the urethra or bladder, therefore ſmall pledgets of ſoft lint, armed with a liniment, were gently placed at the bottom of the wound. In about eight weeks the cure was finiſhed, and he made water in all reſpects as well as ever.

CASE XIV.

Of a Needle run into the Arm, and extracted at the Breaſt.

A Woman working with a ſmall needle, ſtuck it upon the ſleeve of her gown, whilſt ſhe did ſomewhat about her houſe; but by her accidentally running againſt a door, ſhe drove it, with ſome thread twiſted about it, into her left arm, about ſix inches below her ſhoulder; and a young woman who was by endeavouring to draw out the needle, broke off the eye of it, and left the needle in her arm; upon which ſhe directly applied to a ſurgeon, who endeavoured to extract it, but could not without laying her arm open, which ſhe would not ſuffer. About a month after the accident, ſhe felt a gnawing pain above the place where the needle ran in, and up to her left ſhoulder, which laſted three or four days, and ſo returned by fits, till at length ſhe felt a like pain (as ſhe thought) at her ſtomach, which made her very ſick, and brought on reachings to vomit, and continued to afflict her, eſpecially in the mornings, till about a month after the accident; when one day towards the evening, ſhe fancied a pin was got into her right breaſt, in the under part; and two days after applied to a ſurgeon, who the ſame day lanced her breaſt, and extracted the ſame needle, as ſhe verily believes, which entered her arm, as it had no eye, but the thread twiſted round it. From the time the needle was ſo drawn out, ſhe had never any return of pain in her breaſt, ſtomach, ſhoulder, or arm.

CASE XV.

Of a Mortification.

A Gentleman 67 years of age, who all his life-time before had enjoyed a perfect ſtate of health, applied to a ſurgeon on account of a mortification, which began about a month before on one of his toes, and by gradual advances in that time, had reached half way up his leg, and this without any manifeſt cauſe. He ſaw himſelf dying daily by piece-meals, but heart whole, (as he expreſſed it) and had a pretty good pulſe. Amputation was immediately propoſed as the only remedy, which he was told would give him ſome chance for his life, though the odds were againſt him. This he readily conſented to; and as ſoon as dreſſings could be got ready, the operation was undertaken. The leg being taken off at the uſual place, which was about four inches above the mortification, about two or three ounces of blood iſſued from the muſcular part; but upon ſlacking the turniquet, in order to look for and tie the artery, not one drop of blood flowed, to the great ſurprize of the operator, who, upon feeling the extremity of the artery, found it hard and callous: however, he ſecured it by a ligature as uſual, and dreſſed the ſtump. The patient, who had borne the operation with the greateſt reſolution, being put to bed, the ſurgeon proceeded to examine the leg; and having diſſected the artery, with it's two conſiderable branches, as far as the knee, he found them for the moſt part oſſified, or hardened to bone; that is to ſay, the trunk, where it was amputated, was hardened about two-thirds of it's circumference: about a quarter of an inch lower, the whole was bony, leaving ſo ſmall an orifice, that it would only admit of a hog's briſtle, and not a very fine probe, which was endeavoured to be introduced. A little lower, it was on one ſide bony, on the other membranous, then again an entire caſe of bone; and here and there, for the breadth of a barley-corn, there would be no bone at all. About two inches of the internal branch being opened immediately above the ancle, and appearing blacker than the reſt; after it had been waſhed, about two or three drops of coagulated blood were found in it; and after it was expanded and dried, it was one entire ſcale of bone, as thick as the ſhell of a pigeon's egg, and of an unequal ſurface. Three ramifications of this internal branch in the foot being diſſected, only one of them had a very ſmall piece of bone in it, about half an inch from the trunk. The other great branch which runs on the ligament that ties the branches together, was not ſo much oſſified as that which has been deſcribed; the bony ſhell was contained within the coats of the artery. This oſſification was no doubt the cauſe of the mortification, and of the patient's death, which followed four days after the amputation.

CASE XVI.

Of Excrements diſcharged at an Ulcer in the Groin.

A Poor woman, of about 40 years of age, belonging to the town of Aulceſter, in the county of Warwick, returning home from a neighbouring village, was ſuddenly taken with a violent pain in her right groin, which was accompanied with ſtrong hiccups; a ſmall ſwelling appearing there, about the ſize of a nutmeg, in the ſpace of half an hour's time after the ſeizure; which ſwelling became by degrees hard, and at length black. The woman thus ſeized with a fever, and other intenſe pains, having no medical aſſiſtance, and not knowing any of the by-ſtanders, was by them recommended to God by public prayers, as one about to depart this life; but at length, by the application of a poultice, the compoſition of which is not mentioned, the ſwelling broke, and from the wound was diſcharged whatever ſhe eat or drank, for the moſt part unaltered, in about the ſpace of a quarter or half an hour after eating; the diſcharge being made with little or no pain, either in the ulcer or inteſtine. Thus one day ſhe eat ſome boiled milk; after which, was diſcharged firſt the milk by itſelf, and afterwards milk curdled, with a noiſe and froth like the breaking of wind from the anus. At length a phyſician being called, found the woman hectic, emaciated, thirſty, and diſcharging her urine and excrement without any pain, at ſtated times. The ulcer appeared to be two or three inches long, and half or two-thirds of one broad, but not deep, being almoſt level with the ſkin. A laxative ptiſan was now ordered to be taken in four doſes; but as the firſt doſe was immediately diſcharged through the ulcer, without producing any ſtool that day, a purgative bolus was given, part of which was alſo evacuated from the ulcer in the ſpace of half an hour after taking; yet the patient had afterwards two ſtools, and the diſcharge from the ulcer was much leſs than before. The next day ſhe took the like bolus again, which gave her three large ſtools, bringing away many hardened fæces; while in the mean time the ulcer diſcharged little or nothing during the whole night. After this ſhe was ordered to drink two or three pounds daily of a drying and vulnerary drink, repeating the ſame bolus at intervals; and by theſe means ſhe was cured within the ſpace of fourteen days.

CASE XVII.

Of a corroded Shin-Bone.

A Lad, ten years of age, had the misfortune to receive a blow with a ball on his right-ſhin bone: however, the pain it occaſioned was ſoon over, and conſequently the lad took no longer any thought about it. His parents alſo little imagined that this blow would have had thoſe bad conſequences which declared themſelves a little time afterwards: the part began to be painful, looked red, and ſwelled; all the care taken by the application of diſcutients was to no purpoſe. The inflammation collected into a tumour, which opened itſelf, and was treated like other ſores. In time it ceaſed, and was thought to have emitted only a putrid matter.

Application was at length made to a ſurgeon, who carefully examined the ulcer, and immediately perceived that the larger bone of the leg, or ſhin-bone, was not only affected, but alſo ſomewhat diſlocated; a hard kind of protuberance, as large as a gooſe-egg, could be felt in the ulcer. The trepan was now uſed; upon which a large quantity of thick matter oozed through the opening.

As it was neceſſary to ſee how far the bone was tainted, the ulcer was opened wider, and then the corroded part of the ſhin-bone appeared to be about four finger-breadths long. It had ſeveral fiſſures. Upon being ſqueezed on the ſides, a thin fœtid matter ran out, and it yielded to an impreſſion.

This corroded piece of bone being quite mortified, there was a neceſſity of immediately taking it out; for though it might be conceived that it would ſoon become ſo looſe as to be entirely taken away with much more ſafety and eaſe, yet the bone would thereby be rendered ſhorter, and crooked, and thus occaſion a lameneſs. The ſmall bone, at the patient's tender age, appeared too weak againſt ſuch an unhappy effect, when ſo many and ſuch long muſcles were expoſed to a contraction; and by a longer delay it was apprehended that the mortification might ſpread. Another danger was, that ſome of the matter might, through the tubes, reach the veins and blood, which would infallibly bring on a conſumption. On the other hand, the piece of the bone being already trepanned, the matter iſſuing through it's fiſſures, and the ſide of it being conſiderably looſened, it was hoped that a ſhort delay would be attended with no detriment, or rather be a relief to the patient; and the ſurgeon was alſo very deſirous that the fiſſures might be turned to ſome advantage, and was not without hopes that they would gradually enlarge, ſo that the pieces might ſucceſſively be taken away, always leaving ſomething to prevent the contraction of the muſcles, till a callus ſhould be produced to ſupply the places of the pieces taken out. Nature here aſſiſted exceedingly; for about half of the corroded bone became ſo looſe, as to be taken out without the leaſt difficulty. At the ſame time alſo the other half might have been extracted, but it was deferred for ſome time for the purpoſe above-mentioned, which was by this means accompliſhed; but with this inconvenience, that the wound inclined to heal, and the tumefied fleſh was grown ſo far over it, that in taking out the piece which had been left behind, the young patient ſuffered more than in all the former part of this cure. However, a callus ſucceeding in the place of the piece taken out, the child perfectly recovered, had both legs of an equal length, and uſed them with the ſame eaſe and activity as before the accident.

CASE XVIII.

Of a Piſtol ſhot through the Breaſt.

A Privateer returning from her cruize into port, the fire-arms were ordered to be unloaded and cleaned; but it happened that one of the piſtols, after ſeveral attempts, would not fire; and the gunner gave it to a mate, who careleſsly ſnapping it, it went off, and ſhot him. The ball entered his breaſt between the ſixth and ſeventh ribs, about the midway between the breaſt-bone and back-bone, and came out cloſe to the lower part of the ſhoulder-blade near the ſpine.

The man being brought aſhore, a ſurgeon was called in to examine the caſe; the wounded man was very low, pale, almoſt dead, and ſcarce able to ſpeak; and the blood ran out of the wound whether he was laid on his face or on his back. Twelve ounces of blood were ordered to be taken from his arm, and a clyſter of ſea-water was thrown up, which gave him ſome ſtools. In the mean time, the upper part of his body was rolled up with linen cloths dipped in oxycrate; and for coolneſs, as the weather was extremely hot, he was laid on the floor, with one blanket under him. In about two hours after, ſix ounces more of blood were taken away, and the ſtained cloths were removed, whilſt others were applied, very wet with the ſame liquor. Two hours after, he was a third time blooded, and the cloths were renewed by clean ones, wetted as before: in about four hours more, five ounces of blood were again taken away, and freſh cloths, dipped in oxycrate, applied. He now complained of being chilly, and the cloths were not diſcoloured. The next morning the cloths were removed, and the wounds examined, and dreſſed in the uſual way. In four or five days, the lips of the wounds began to be enflamed, and afterwards to ſuppurate, having diſcharged a bloody thin matter for ſome days before: they then digeſted and healed, without any trouble, in about three weeks. He appeared a walking ghoſt for ſome time, but recovered his ſtrength in about nine weeks, and went again a privateering.

CASE XIX.

Of a ſingular Recovery from a Fever.

A Young lady, about the 30th year of her age, was ſeized with a fever, which continued about ten days, and then left her very weak. Three days after her recovery, ſhe caught cold, which brought on a relapſe. For the two firſt days after the return of her fever, ſhe had a ſickneſs and vomiting, which prevented her taking any nouriſhment. Theſe ſymptoms diſappeared with the uſe of the ſaline draughts, but were ſucceeded by profuſe ſweats, which weakened her extremely. A bliſter was ordered to her back, ſome cordial boluſes, and a few drops of the antiphthiſical tincture. Her ſweats diſappeared the next day; but ſhe ſuffered very much from the ſtrangury, and complained of being oppreſſed with wind in her ſtomach and bowels; the uneaſineſs ſhe was under from theſe complaints preventing her getting any ſleep, which ſhe very much wanted, not having had any ſince the time of her relapſe; and after they were removed, ſhe ſlept very little, and obſerved that the ſhort ſleeps which ſhe got were not refreſhing. About the fifth day, ſhe began to be affected with twitchings; and her weakneſs was ſuch as not to permit of her being raiſed up in bed without fainting. Her pulſe was ſmall and quick, and was not to be kept up but by a frequent repetition of warm cordial medicines; for when ſhe continued long without ſomething of that kind, her pulſe was quite depreſſed, and her twitchings more violent. On the eighth day ſhe had all the appearance of a perſon at the laſt extremity: bliſters, which had been laid above her ancles the night before, had not riſen at all, or given her the leaſt pain. The twitchings were conſtant, and ſometimes ſo violent, that ſhe appeared to be quite convulſed. She had a pale, ſunk countenance, with a livid ſtroke on each ſide the noſe, together with a convulſive laugh; and her ſweats had that earthly kind of ſmell which is frequently perceived from ſuch as are near their end. She had hitherto had no ſleep that had done her any ſervice, as it was always of ſhort duration, and left her flurried and diſcompoſed, and ſometimes even convulſed.

Particularly this evening ſhe waked from a ſhort ſleep, in ſuch agonies, that ſhe ſaid ſhe was not able to ſurvive ſuch another ſtruggle, and begged that ſome perſon might watch her for the reſt of the night, and prevent her going to ſleep: but it was ſuggeſted to her that ſhe might venture to go to ſleep, provided her phyſician attended all the while to her breath and her pulſe; and in caſe they failed, awaked her before ſhe could ſuffer much from this kind of ſuffocation.

She readily agreed to this propoſal, after being aſſured that ſhe would not be in danger of ſuffering as before: ſhe was very much diſpoſed to ſleep, and had been kept from it only by the dread of it's conſequences. The phyſician kept his hand conſtantly upon her pulſe; and it was not long before he perceived her to be aſleep. It did not appear to be above half a minute before her pulſe ſtopped, and ſhe could not be heard to breathe: ſhe was then immediately waked; and agreeably ſurprized her attendants, by ſaying, that ſhe had had a very refreſhing ſleep, for ſhe ſeemed not ſenſible how ſhort it had been. She was then adviſed, as ſoon as ſhe had recovered her breath, to compoſe herſelf again, which ſhe did, and her ſecond ſleep was about twice as long as the firſt. When her breath and pulſe failed, ſhe was awaked again, and expreſſed the ſame ſatisfaction as before. In continuing this method, her ſleep was every time of longer duration than the preceding; her pulſe grew apparently ſtronger and fuller, and her twitchings were leſs frequent. It was about midnight when ſhe began to ſleep; and betwixt two and three in the morning ſhe complained that the bliſters above her ancles were very painful. During the time the phyſician was attending her pulſe, it once happened that he fell aſleep himſelf, and let her continue too long before he awaked her: ſhe was very ſenſible of his neglect from what ſhe felt, and begged of him to be more attentive. However, betwixt four and five in the morning, her ſtrength was ſo much improved, that ſhe could ſleep without danger.

The next day her bliſters had roſe very well, and her fever left her; but in ſo weak a condition, that ſhe was conſtantly in hyſtericks for the two ſucceeding days, being always either laughing or crying whilſt awake, and making ſudden tranſitions from the one to the other on the moſt trifling occaſions. Neverthelеſs, ſhe afterwards recovered her health and ſtrength in leſs time than could well have been expected.

CASE XX.

Of a Catalepſy.

IN the latter end of the laſt year, Dr. J. Jebb was deſired to viſit a young lady, who for nine months had been afflicted with that ſingular diſorder termed a *catalepſy.* Although ſhe was prepared for the viſit, ſhe was ſeized with the diſorder as ſoon as his arrival was announced. She was employed in netting, and was paſſing the needle through the meſh; in which poſition ſhe immediately became rigid, exhibiting, in a very pleaſing form, a figure of death-like ſleep, beyond the power of art to imitate, or the imagination to conceive.

Her forehead was ſerene, and her features perfectly compoſed. The paleneſs of her colour, her breathing at a diſtance being alſo ſcarce perceptible, operated in rendering the ſimilitude to marble more exact and ſtriking. The poſition of her fingers, hands, and arms, was altered with difficulty; but they preſerved every form of flexure they acquired: nor were the muſcles of the neck exempted from this law; her head maintaining every ſituation, in which the hand could place it, as firmly as her limbs.

Upon gently raiſing the eye-lids, they immediately cloſed, with a degree of ſpaſm. The iris contracted upon the approach of a candle, as in a ſtate of vigilance; the eye-ball itſelf was ſlightly agitated with a tremulous motion, not diſcernible when the eye-lid had deſcended.

About half an hour after his arrival, the rigidity in her limbs and ſtatue-like appearance being yet unaltered, ſhe ſung three plaintive ſongs, in a tone of voice ſo elegantly expreſſive, and with ſuch affecting modulation, as evidently pointed out how much the moſt powerful paſſion of the mind was concerned in the production of her diſorder; as, indeed, her hiſtory confirmed. In a few minutes afterwards, ſhe ſighed deeply, and the ſpaſm in her limbs was immediately relaxed. She complained that ſhe could not open her eyes; her hands grew cold; a general tremor followed; but in a few ſeconds, recovering entirely her recollection and powers of motion, ſhe entered into a detail of her ſymptoms, and the hiſtory of her complaints.

She informed him that ſhe had no recollection whatever of what paſſed in the fits; that upon coming out of them, ſhe felt fatigue in proportion to the time of their continuance; and that they ſometimes laſted for five hours, though generally for a much ſhorter period.

She farther related, that the fits returned once or twice a day, ſometimes more frequently; but that ſhe was never troubled with them in the night. She ſometimes loſt her ſight and ſpeech, the power over her limbs and intellectual faculties remaining unimpaired. The fits frequently attacked her without any previous warning; at other times, a fluttering at her ſtomach, and a fixed pain at the top of her head, occupying a part which ſhe could cover with a finger, announced their approach.

Hyſterical riſings in her throat, appearances of fire, pains in her eyes, and not unfrequently in her teeth, flatulence, a ſenſe of weight in her ſtomach after eating, with convulſive motions in the region of that organ, were ſuperadded ſymptoms, of which ſhe much complained.

Her diſorder was evidently exaſperated at the approach of the catamenia, which were conſtantly preſent at the regular period. She was always much agitated previouſly to a ſtorm of thunder; and every material alteration of the weather produced a ſenſible effect.

After ſhe had diſcourſed for ſome time with apparent calmneſs, the univerſal ſpaſm ſuddenly returned. Her features now aſſumed a different form, denoting a mind ſtrongly impreſſed with anxiety and apprehenſion. At times ſhe uttered ſhort and vehement exclamations, in a piercing tone of voice, expreſſive of the paſſions that agitated her mind; her hands being ſtrongly locked in each other, and all her muſcles, thoſe ſubſervient to ſpeech excepted, being affected with the ſame rigidity as before. During the time of his attendance, ſimilar appearances were frequently exhibited. The phyſician was informed by the family of many particularities in the acceſs of the diſorder, all denoting it's inſtantaneous effect upon the nervous ſyſtem. She once was ſeized in his preſence while drinking tea, and became univerſally rigid at the inſtant ſhe was advancing the tea-cup to her mouth. Her tears ſometimes flowed copiouſly, while every internal as well as external ſenſe ſeemed locked up in ſleep.

It appears, that for many years before the acceſs of the cataleptical ſymptoms, ſhe had ſuffered much from violent head-aches, particularly that ſpecies of head-ache termed *clavus hyſtericus*, the hyſteric head-ache. Her ſpirits were eaſily diſcompoſed. Her fingers, upon touching cold ſubſtances, would frequently loſe their natural heat and feeling. Her habit of body had been uncommonly coſtive, but of late her bowels were much diſturbed by every kind of laxative. Her nervous complaints were always particularly troubleſome at the approach of rain, and after a ſleepleſs night.

Her diſorder commenced with hyſteric fits; to theſe ſucceeded a delirium of ſeveral days continuance, attended with ſlight ſhiverings, but no other ſign of fever. The catalepſy followed next in order, which at firſt affected her with only ſingle fits, at a week or fortnight's interval: theſe gradually advanced in ſtrength and frequency, until, by her own ſufferings, and her ſenſibility on account of the anxiety of her friends, ſhe was reduced to the moſt pitiable diſtreſs.

Before Dr. Jebb ſaw her, ſhe had been under the care of a phyſician of eminence in the country, who had attended to her caſe with ſingular humanity, and had preſcribed various medicines of the nervous kind, which at one time produced ſo favourable an effect, as even to flatter with the proſpect of a cure; but the ſymptoms returning with increaſed violence, through freſh anxiety of mind, the ſame courſe of medicine was not attended with the ſame ſucceſs.

Muſk, opium, and bark, the latter of which did not always agree with her bowels, were found moſt effective. Of muſk ſhe had taken to the amount of a dram and a half each day. It's uſe removed a ſenſe of chilneſs, of which ſhe before had much complained. A few drops of laudanum at the hour of reſt had alſo been attended with advantage.

After her phyſician had tried Hoffman's mineral anodyne liquor, eſſential oil of camomile flowers, oil of amber, extract of Hemlock, prepared ruſt of ſteel, ſalt of amber, camphire julep; and opium in a great variety of forms, without much advance, he found the following application had an evident good effect.

> Take purified opium and camphire, of each one dram; of the ſtomach plaiſter, as much as will mix with theſe ingredients: make a plaiſter to be applied to the region of the belly.

Obſerving the effect of this application, and reflecting upon the many tokens of debility which her ſtomach exhibited, he directed his attention to the ſtrengthening of that organ; and notwithſtanding the diſcouraging circumſtances that had formerly attended the exhibition of the bark, determined to make another trial of it's power.

He choſe the following form of preparation, which Dr. Whytt had found to be particularly ſerviceable in hyſterical complaints.

> Take of Peruvian bark powdered, two ounces; gentian root and peel of Seville orange, of each ſix drams. Mix and infuſe theſe ingredients in a quart of French brandy for ſix days, in gentle heat.

Finding, upon trial, that half an ounce of this tincture, the quantity directed by Dr. Whytt, though diluted with two ounces of water, was more than her ſtomach would bear, he preſcribed as follows.

Take of pure water an ounce and a half; of the tincture preſcribed, two drams; of compound ſpirit of lavender, one dram. Make a draught to be taken twice a-day.

Inſtead of the common kinds of tea, he adviſed her to drink an infuſion of the outward rind of lemon, which appeared particularly grateful to her taſte and ſtomach. She declared that ſhe felt immediate benefit from this preſcription.

She took ſome drops of Hoffman's anodyne liquor, or of laudanum, as occaſion appeared to require.

She perſiſted in this courſe with evident advantage. Her fits grew leſs frequent, returning faintly after a week or fortnight's interval; her ſpirits were improved, her ſtrength increaſed; until at length, without the uſe of any other medicines, ſhe became intirely free from all complaint.

CASE XXI.

Of the Effect of Imagination in a pregnant Woman.

A Female child was born with a wound in her breaſt above four fingers long: it penetrated to the intercoſtal muſcles; and it was at leaſt an inch broad, hollow under the fleſh round about the wound; beſides that, there was a contuſion, with a little ſwelling at the lower part of the wound in the inſide. The child came into the world without any violence, and conſequently it did not receive this wound in it's birth, but it was cauſed by ſtrength of imagination; for about two months before, the mother had, by chance, heard a report, that a man had murdered his wife, and with a knife had given her a great wound in her breaſt; at which relation ſhe ſeemed affected, though not exceſſively.

It is probable that the child received the wound in it's mother's body at that very moment that ſhe was affrighted; becauſe the wound was very foul, and the inſide, as well as the outſide, was beſet with ſlime, proceeding from the water wherein the child lies in it's mother's womb; and it was alſo like an old wound.

CASE XXII.

Of a Girl with horny Excreſcences.

THIS girl was called Anne Jackſon, and was born in Waterford, of Engliſh parents, who were both ſaid to have been ſound and healthy. This infirmity did not ſhew itſelf till ſhe was about three years old; and at the time this caſe was drawn up, ſhe was about 13 or 14 years of age, yet could ſcarce walk; and was ſo low in ſtature, that many children of five years old are taller. She had very weak intellects, ſpoke but little, and that not plainly, but haſtily, and with difficulty. Her voice was low and rough; her complexion and face well enough, except her eyes, which looked very dull, and ſeemed to have a film or horn growing over them, ſo that ſhe could hardly perceive the difference of colours. The horny excreſcences abounded chiefly about the joints and flexures, and not on the brawny fleſhy parts of her body. They were faſtened to the ſkin like warts, and about the roots reſembled them much in ſubſtance, though towards the extremities they grew much harder and more horny. At the end of each finger and toe, grew one as long as the finger and toe; not ſtraight forwards, but riſing a little between the nail and the fleſh, (for near the roots of theſe excreſcences ſomething like a nail appeared) and bending again like a turkey's claw, which, too, it much reſembled in colour. On the other joints of her fingers and toes were ſmaller ones, which ſometimes fell off, others growing in their places. The whole ſkin of her feet, legs, and arms, was very hard and callous, and grew daily more and more ſo. On her knees and elbows, and round about the joints, were many horns; two more remarkable at the point of each elbow, which twiſted like rams-horns: that on the left arm was above half an inch broad, and four inches long. On her buttocks grew a great number, which were flatted by frequent ſitting; at her arm-pits, and the nipples of her breaſts, ſmall hard ſubſtances ſhot out, much ſlenderer and whiter than the reſt: at each ear, alſo, grew a horn. The ſkin of her neck began to turn callous and horny, like that of her hands and feet. She eat and drank heartily, ſlept ſoundly, and performed all the offices of nature, like other healthy people, except that ſhe never had the evacuation uſual with her ſex.

CASE XXIII.

Of a Fever.

A Pregnant woman, 28 years old, who daily expected to be brought to bed, was attacked on the 9th of January with wandering rheumatic pains, eſpecially in her ſhoulders and arms; and at the ſame time had a diſpoſition to a diarrhœa. On the 11th in the morning ſhe was ſeized with a violent ſhivering, which was ſucceeded in the evening by labour pains; but as ſhe was diſappointed in her midwife, the child was born without any aſſiſtance, and the mother ſuffered greatly by contracting freſh cold; a fever, with increaſe of her rheumatic pains, and a diarrhœa, enſued.

On the 13th, the third day after her delivery, ſhe took a rhubarb draught, and a cretaceous mixture was ordered to be given every ſix hours after.

On the 14th, the fever was very conſiderable; ſhe had a quick, depreſſed pulſe, 125 in a minute; the diarrhœa was increaſed, and the ſtools were dark-coloured and very fœtid; the tongue was dry, and a drowſineſs came on; but neither the uſual diſcharges after child-birth or the milk had appeared. There was no tightneſs or pain in the belly, except ſome griping from the looſe ſtools. The hands and arms were ſo ſwelled, that it was difficult to feel the pulſe; and ſo inflamed and ſore, that ſhe could hardly bear the touch of a finger. No urine was ſaved. A cretaceous mixture was ordered, with a little cordial confection and liquid laudanum, to be taken after every ſtool.

On the 15th, ſhe was nearly the ſame as the day before, excepting that the diarrhœa was a little abated.

On the 16th, the fever and diarrhœa were increaſed; the tongue was very dry and brown; and a miliary eruption appeared. The medicines were changed for the compound powder of bole without opium.

On the 17th, her friends, believing ſhe muſt inevitably die, oppoſed giving any medicines, that ſhe might not be diſturbed; but being perſuaded there was a chance for life if they would ſtill exert themſelves, they complied with the directions of the phyſician. She appeared much worſe, her ſtools were voided inſenſibly, and very frequently. And as it was now plainly perceived that the fever was of the putrid kind, and that the patient muſt fall a victim to it unleſs ſpeedily relieved, the following was preſcribed.

> Boil one ounce of the powder of Peruvian bark gently in ſixteen ounces of pure water till it is reduced to twelve. Give four ounces every hour.

But from the particular diſpoſition of her friends, her phyſician could not procure any farther admiſſion of freſh air, than by opening the door now and then.

On the 18th, the fever, diarrhœa, and other ſymptoms, were much as the preceding day; and as it was found that the frequent repetition of ſo large a draught of decoction of the bark could not be diſpenſed with, and that this and every thing taken preſently, paſſed off by ſtool, the following was ſubſtituted.

Take of Peruvian bark bruiſed, one ounce; boil it gently in twelve ounces of water till it is reduced to ſix; ſtrain it off, and add of tincture of cinnamon two ounces; of this mixture give two common table-ſpoonfuls every hour.

On the 19th, the ſtools were equally frequent, though not quite ſo fœtid, and a ſmall remiſſion of fever was obſerved. Three drops of liquid laudanum, were added to each doſe of the decoction of bark, which was continued every hour as yeſterday.

On the 20th, a remiſſion was rather more evident than yeſterday.

On the 21ſt, there was a diſtinct, though ſhort intermiſſion of fever, in which ſhe ſlept a little, and awaked rather refreſhed and leſs wandering. The diarrhœa continued the ſame.

On the 22d, the fever and diarrhœa were abated. She had ſome refreſhing ſleep, and was more ſenſible. The tongue became moiſt, and in three days from hence, the miliary eruption and all ſigns of putridity went off. Perceiving that her arms and legs, which had been highly inflamed and ſore during the fever, were now ſwelled; that the blood was much impoveriſhed, and the whole vital power greatly impaired; ſhe was urged to take ſome medicines farther to corroborate and haſten the recovery of her ſtrength, but ſhe refuſed. The ſwellings of the arms and legs were formed into abſceſſes, which broke, and continued a long time diſcharging matter; but all gradually healed as ſhe recovered ſtrength.

CASE XXIV.

Of extraordinary Coſtiveneſs.

ONE Thomas Phillips, of Eaſtthorp, near Keldon, in Eſſex, was well in every reſpect till he was a year and a quarter old; at which time a very ſtrange, and almoſt continual rumbling in his inteſtines, ſeized him; the conſequence of which was a violent looſeneſs, for which all the phyſicians near the place could find no remedy; but at length, when the child's life was deſpaired of, the looſeneſs terminated in ſuch an obſtruction, that he did not go to ſtool for a fortnight or three weeks together; and from three weeks it proceeded gradually to the intervals of ſeventeen or eighteen weeks, and continued ſo till he came to be about the age of fifteen, when his body reſumed it's natural temper, which laſted four or five years; but then the obſtruction returned, and it increaſed till he died; for it was cuſtomary with him, in the latter years of his life, not to evacuate any excrement under the interval of nineteen or twenty weeks, and ſometimes (twice at leaſt) he had no diſcharge for twenty-one or twenty-two weeks together. He lived to be near twenty-three years of age, and walked about almoſt to the hour of his death; for he was ſuddenly ſeized with very ſick fits, but could not vomit; two or three of which fits carried him off in a few hours, and he died nine weeks after he had had any ſtool. The patient never vomited, nor had at any time any excrementitious taſte in his mouth; neither did he ſweat much, nor make more urine than in proportion to his drinking. When the patient went to ſtool, he evacuated ſeveral times in a day, and that for ſeveral days together, till he had emptied himſelf; and throughout his whole life he never diſcharged any other than thin excrements. Before the time of evacuation came about, he was of an extraordinary bigneſs, even ſeveral weeks before his going to ſtool, unleſs he could break wind, which he often endeavoured to do, by laying his body on the edges of a table or ſtool, but often to no purpoſe. He declined the uſe of any medicines for ſeveral years before he died, contenting himſelf with going to ſtool once in three or four months, or in nineteen or twenty weeks, as above-mentioned. But what was ſurprizing, he generally had a pretty good appetite, and eat and drank as the reſt of the family did; nay, till the time that his body came to be very full, he could work at the plough, or ſuch like huſbandry labour.

CASE XXV.

Of a Fracture and ſhortened Thigh-Bone.

IN the month of June 1743, a ſailor fell from the main-top-maſt-head, (where he was ſplicing ſome of the rigging) and broke his thigh-bone againſt the gunnel of the veſſel.

The bone was forced through the wounds; the upper extremity of the fractured bone had made it's way externally through the muſcle called the *vaſtus externus*, and the lower bone appeared through the teguments internally at leaſt an inch and a half. A ſurgeon being ſent for, and proper aſſiſtants provided, each wound was dilated near an inch, in order to facilitate the reduction; care being taken, whilſt the extenſions were making, to preſs the bones through the ſame parts of the lacerated muſcles where they had made their paſſage; but this attempt failing, the parts were more opened, and the attempt repeated, but with as little ſucceſs as before, nor could the bones be moved. A neceſſity now appeared of taking off part of the lower extremity of the thigh-bone; which being conſented to, and the limb placed with an intervening body under the bone, an inch and a quarter of it's ſubſtance was cut off with the capital ſaw, and then the fracture was reduced. The wounds were waſhed with warm wine, and the parts cleanſed from blood: they were then dreſſed with oil of turpentine made hot, pledgets of lint, ſpread with the uſual ointments, and digeſtives, and the whole limb covered with an oatmeal and ſtrong beer poultice, made very warm. The bolſters, compreſſes, and bandage, were properly applied; after which about ten ounces of blood were taken from his arm, and an anodyne was ordered to be given in about two hours time.

The next day he had a fever, for which more blood was taken away, the limb ſwelled and loſt it's natural heat; a gangrene threatened; for which flannels, ſqueezed from a fomentation of the plants, were applied, and the ſame dreſſings continued, with cordials and anodynes, till the fifth day, when a digeſtion came on, and his fever, for which he took a decoction of the bark, intermitted. About the 9th day it was diſcovered that a large abſceſs was formed on the outſide of the limb, about an inch below the wound; which being laid open diſcharged near four ounces of matter: this was dilated up to the other wound where it ended. The bones were now in ſight, and milder dreſſings were therefore applied, and the ſolid parts covered with lint moiſtened in alcohol, to keep them from abſorbing the matter.

About the 16th day, the wounds diſcharged great quantities of fœtid matter, and another abſceſs formed in the inſide of the limb, which was opened, and the matter diſcharged. A probe could now be paſſed from this part to the wound on the ſame ſide, through which a flamula was drawn, in order to invite the matter to this depending part, and avoid the dangers of fouling the bones. In about four days that intention was anſwered, and the diſcharge decreaſed, the wounds having a good aſpect.

At the end of the month the danger ſeemed to be over; the ſeveral abſceſſes, ulcerations on the ſhin, inflammations, eryſipelatous ſwelling, with livid ſpots, and the whole train of ill appearances were ſurmounted. What now remained was to correct the ſhortneſs of the limb, and reſtore it to it's due length, that the recovery might not be attended with lameneſs. In order to which, a ſtaple was ordered to be driven in the floor (on which the patient's bedding lay) the extenſions were made by proper aſſiſtants, and ſome girth-web was faſtened into the cloth fixed above the knee, which was faſt to the ſtaple at the foot of the bed. Some ſlips of ſtrong ſheeting were then paſſed withinſide of the thigh outwards, cloſe up to the groin, which were faſtened to another ſtaple behind the bed: this laſt contrivance was to counter-act and prevent the body from ſliding on the fractured limb, as well as ſecure it in the poſition, and keep the body ſteady.

In this poſture, or as near it as poſſible, the patient continued near two months; the dreſſings being altered as the ſymptoms required, and particular care being obſerved to keep the bones from growing foul by drying applications. The bones now began to ſcale or exfoliate, which continued near a fortnight, at the end of which the wounds healed daily, and at every dreſſing a freſh extenſion was made, and by degrees the limb was ſtretched out to the length of the other, with which it was compared, obſerving alſo the proper curvature. The ſingle-headed circular roller had now it's place; and in this method he was treated till his wounds were near healing. At the end of eighteen weeks he ſat up, craved for food, recovered his fleſh and ſtrength, and ſoon after took to his crutches.

At the expiration of thirty weeks he limped very little, was judged capable of doing his duty as a ſailor, and was entered on board a veſſel as an able man. In about five months he returned from North America in the ſame veſſel, having worn the circular roller the whole voyage: his thigh was then examined, and a node was found, but ſcarce large enough to diſcover where the bones were ſeparated.

CASE XXVI.

Of the Uſe of Mercurial Ointment in the Natural Small-Pox.

A Perſon who had the confluent ſmall-pox in the natural way, was viſited by a phyſician on the eighth day, who found him in a cloſe, confined room, out of which the air was as much as poſſible excluded; and in ſpite of all his intreaties, he never could perſuade the friends of the poor patient to take him out of bed, or to admit a more free acceſs of air; ſo that the remedies to be applied had every obſtacle to oppoſe. The face had acquired a cadaverous aſpect; the ſmall interſtices betwixt ſome of the puſtules were alſo pale; and the puſtules, which had run into each other, were ſo flattened, that they were rather concave than convex. The pulſe was 135, but diſtinct; the breathing was extremely laborious, and a total ſuffocation ſeemed approaching; the face, which had been ſwoln, was ſunk; and the ſlight ſalivation, which had commenced the day before, was entirely ſuppreſſed; and every other evacuation in a degree. The urine was paſſed very ſparingly, and the patient had not had any ſtool for a week, nor enjoyed any ſleep for two days and nights: his feelings he could not relate, as he was incapable of ſpeaking, and had not for twelve hours before aſked for any thing, nor taken any nouriſhment; he was, indeed, a moſt dreadful object. The phyſician immediately ordered that ſmall beer, porter, milk-pottage, and good wine-whey, ſhould often be put to his mouth, that ſome little nouriſhment might, if poſſible, be ſwallowed. His medicines were one ounce of infuſion of ſenna, to be taken every three hours, until it ſhould have effect; and equal quantities of acid and anodyne mixtures, to be taken to the amount of an ounce mixed three times a day. Of the deobſtruent powder, fifteen grains every night; and one ſcruple of ſtrong mercurial ointment rubbed into his thighs morning and evening.

On the tenth day, he had enjoyed ſeveral hours of reſt, and drank about a quart of different fluids; his face looked leſs cadaverous, and began to enlarge; and a ſlight ſalivation had come on again: he now ſpoke a little, though not very clearly; the pulſe was ſlower and more full, and the breathing leſs laborious; but he had not yet had a ſtool; the urine was, however, greatly increaſed, and the ſymptoms in general leſs alarming.

A common clyſter was now ordered to be adminiſtered; and half an ounce of the infuſion of ſenna to be taken every three hours, until it ſhould anſwer. The acid and anodyne mixtures to be repeated as before, and the mercurial ointment.

On the eleventh, the patient had had four or five dark-coloured, offenſive ſtools; and the ſalivation was very copious, as well as the diſcharge of urine; the pulſe was not lower, but in quickneſs only 120; the puſtules were more full, and the interſtices freſh or red-coloured; he ſlept pretty well, and took near a gallon a day of the above drinks; particularly, he was deſirous of good ſmall-beer; the breathing was very free, and the voice leſs faultering and diſtinct. This day the mixtures, deobſtruent powder, and the uſe of the mercurial ointment, were continued as before.

On the twelfth, the ſalivation was amazingly copious; but the ſtrength increaſed, and every ſymptom appeared more favourable; the puſtules were turning upon the face, but the patient was again coſtive. The deobſtruent powder was repeated as before; and a purging mixture, with the proportion of half an ounce of caſtor oil to every ſix ounces of the mixture, was directed to be taken in the quantity of half an ounce at a doſe, every half hour, until it ſhould operate.

On the thirteenth, ſtools had been procured; and this day the patient was taken out of bed for the firſt time: the pulſe was only 100, and no fever attended; the ſalivation was ſurprizingly great, and the patient again ſaw day-light.

On the fifteenth, no fever was evident, but the ſalivation continued copious.

He now began to walk about the houſe, and complained of hunger; and from this time all medicines were diſcontinued, except the decoction of Peruvian bark and acid mixture.

His ſalivation continued for the ſpace of a week; but as he attributed his recovery to that diſcharge, he underwent it with pleaſure.

CASE XXVII.

Of the Hydrophobia, occaſioned by the Bite of a Mad Dog.

JAMES HORTON, of York, a very ſtrong and well-proportioned young man, was bit by a mad dog in the right-hand: the wound healed of itſelf, and the accident was forgotten. In about five or ſix weeks, he complained of pain all over his bones, but eſpecially his back, and round about his ſtomach; he looked very pale and hollow-eyed. The third day after this complaint, he called for brandy, drank it, went to bed, and vomited it up: after this he had a reſtleſs night; and in the morning found himſelf very ill, with a ſtrong riſing in his ſtomach; and though no thirſt, yet an inability of drinking, and even of ſwallowing his ſpittle, which he frequently repeated was death to him. Diaſcordium, and a bottle of cordial water, were brought; he took the former, but was not able to drink one ſpoonful of the cordial: his pulſe was very ſlow, and ſometimes unequal; his fleſh cold, his tongue flexible and moiſt, and a little white. He complained very much of being ſick at his ſtomach; and, upon offering him a cordial, he would ſtart and tremble at the approach of it, as he alſo did at giving him water to drink. Attempting to put the latter to his mouth, he ſeemed more affrighted, would draw back his head, ſigh, and throw a very ghaſtly look upon it, accompanied with a ſhrieking noiſe, from whence it appeared that his diſorder was an hydrophobia, or dread of water: upon which a vein was ordered to be opened in the bitten arm, the wound to be ſcarified and drawn with bliſter plaiſters, and the ſame plaiſters to be applied to the neck, legs, and inſide of the arms. The uſual antidotes were preſcribed in boluſſes, for he could take ſolid things in a ſpoon, yet not without much trembling, fear and caution, and an earneſt requeſt that nobody would ſuddenly offer them to him, but give them gently into his hand; and then he would ſteal them ſoftly to his mouth, and greedily ſwallow them like a dog. Drink was likewiſe offered him, but he could not ſee it without horror, and felt the ſame repugnance to it in his ſtomach. His blood was well-coloured, in ſuch proportion as is uſual in healthful perſons, and of a good conſiſtence. The patient was perſuaded, with much difficulty, to throw himſelf upon his belly acroſs the bed, with his head hanging over the other ſide: in this poſture of a dog, he ſuffered a large bowl, filled with ſmall-beer, to be brought under his head, and embracing it with rapture, he declared he was infinitely refreſhed with the ſmell of it. He endeavoured, with great earneſtneſs, to put down his head to it, but could not, his ſtomach riſing as often as he opened his lips. At length, he put out his tongue, and made towards it as though he would lap; but when his tongue ever ſo little touched the ſurface of the beer, he ſtarted back affrighted, and yet all the while he was pleaſed with the thoughts of drinking, and would not ſuffer it to be taken away from under his head; and if it was a little withdrawn, he would follow the ſmell of it with delight, and ſnuff at it with his noſtrils. At length, he ſuggeſted that the faint ſmell of the ſmall-beer hindered him from drinking, and a bowl of ale was brought him; but after much ſtriving, and exerting his tongue a thouſand times, he could not drink of it, and lapping with great terror, as often as his tongue touched it, he ſtarted back with his head, bringing it down again gently to the bowl a hundred times, but all in vain. He had then a quill given him, conſiſting of two or three joints, the one end in his mouth, the other in the liquor; but he could not manage it, nor ſuck any more than a dog: after this, he was prevailed on to lie down, and in a little time he fell into convulſions, bit, ſnarled, catched at every body, and foamed at the mouth. After this fit was over, he took helebore in a bolus; it operated about three or four times very plentifully, and he declared himſelf wonderfully at eaſe; but yet now and then he would fall into convulſions, and then he was always inſenſible. Some time after he was again ſolicited to drink, and he now readily enough put himſelf into the former poſture, and with as much earneſtneſs as ever uſed all the little ſhifts to drink while the bowl was under his head, but equally in vain. A ſmall ſilver tumbler full of drink was put into his hand, which when he had ſtolen near his mouth, he would have thrown the contents into his throat, but it ſtruck againſt his teeth and fell into the cup again. For forty-eight hours after this, he neither had a ſtool, or made water; and therefore a clyſter was given him; but he did not retain it, and ſoon after he died convulſed.

CASE XXVIII.

Of a Perſon who died paralytic from a Bite of a mad Fox.

A Perſon at Norwich had been bitten by a mad fox in the right-hand: in ſix weeks after, he began to be affected with ſhifting or wandering pains, which ſtill increaſed

creaſed, eſpecially in his right-hand, arm, ſhoulder, and back, but not ſo violently as to compel him to take to his bed. He was adviſed to take a doſe of the common purging ſpirit of ſcurvy-graſs, which gave him ſeven or eight ſtools, and made him very faint and weak; and his right-hand began to be paralytic, though his pain was much abated there, and wherever elſe it had been greateſt. He had bled freely at the wounds which the fox had inflicted, and they healed without farther trouble, only at intervals he felt a little twinging pain in that hand and arm: though the dread of water had not yet appeared, his heat was much increaſed, and his pulſe intermitted every fifth or ſixth ſtroke on the right ſide only. He alſo looked ghaſtly and thin, but his eyes were ſparkling and fiery. The moſt temperate antiſpaſmodic and antiparalytic remedies were directed to be mixed with the ſpecifics commonly uſed in an hydrophobia. The next morning, he complained of a reſtleſs night; that he had wholly loſt the uſe of his right-hand; and that though the pain was more abated, he was very hot and uneaſy. His pulſe was then much ſtronger than over night, but intermitting on the right ſide only as before. His countenance was ſomewhat more ghaſtly, yet his veins were very full, as in the beginning and increaſe of a fever; no hydrophobia appearing, ſix or ſeven ounces of blood were directed to be drawn from the left arm, and what had been formerly preſcribed to be repeated. He bled eight ounces very freely; the blood was well-coloured, but very thick. The ſame day, in the afternoon, the grand ſymptom appeared; his heat was very great, and his pulſe very high and intermitting in both wriſts; and if any thing was offered him to drink, either ſtanding or ſitting, he ſtarted as if his head would have fallen backwards off his ſhoulders; but when laid upon his pillow, he could, though with great difficulty and uneaſineſs, at times get down a ſpoonful. He then looked more thin and ghaſtly than before; and ſeemed afraid of every body that came ſuddenly near him, telling them they ſtifled him, or ſtopped or hindered his breath, in coming ſo ſuddenly upon him. His intellects were all along unaffected; his voice was broken and imperfect, as of thoſe perſons whoſe tongue, and other organs of ſpeech, are turning paralytic. On the third evening, though all the ſymptoms were growing worſe, yet he could walk out of one room into another with very little help; but between twelve and one the next morning, he died, without any convulſive motions, ſighs, or groans, as if in a moment there had been an univerſal palſy.

CASE XXIX.

Of extraordinary Bleedings in an Infant.

A Child, about a quarter of a year old, at Littleſhal, in Shropſhire, was taken with a bleeding at the noſe and ears, and in the hinder part of the head, which laſted for three days; and afterwards the noſe and ears ceaſed bleeding, but ſtill blood, like ſweat, came from the head. Three days before the death of the child, which happened the ſixth day after it began to bleed, the blood came more violently from it's head, and ſtreamed out to ſome diſtance: it alſo bled on the ſhoulders, and at the waiſt, in ſuch quantities that it might be wrung out of it's linen. For three days alſo it bled at the toes, at the bendings of it's arms, at the joints of the fingers, and at the fingers ends; and in ſuch quantities, that in a quarter of an hour the mother had caught, from the droppings of the fingers, almoſt as much as the hollow of her hand could hold. All the time of this bleeding, the child cried not much, but only groaned, though, about three weeks before, it had ſuch a violent fit of crying as was uncommon. After the child was dead, there appeared in the places where the blood iſſued, ſmall holes, like the pricks of a needle.

CASE XXX.

Of a cancerous Ulcer in the Lip, cured by Hemlock.

JANE EGBIN, aged 56, was afflicted with an ulcer of the under lip, of a cancerous appearance: it had continued obſtinate againſt a variety of applications for the ſpace of ſeveral years; and though at the commencement of the complaint, about ten years before, it was troubleſome only from a hardneſs and dryneſs juſt perceptible in the lip, with ſlight ſhooting pains in the neighbouring parts; it became at length very much enlarged, and ſpread into an ulceration, which occupied the whole lip, extending internally as far as the gums, diſcharging a thin, fœtid humour, exciting violent darting pains about the face, and rendering the habit of the patient much emaciated.

Ten grains of the hemlock, in powder, were ordered to be taken three times a day; and, in the ſpace of a week, the addition of a few diſhes of hemlock-tea, firſt to be made weak, and gradually to be increaſed in ſtrength. The ulcer was dreſſed with the following cerate twice a day; and previous to the freſh dreſſing, the part was fomented with a decoction of hemlock, to waſh off any remains of the former dreſſing, which, by a long continuance, might acquire a pernicious rancidity.

Take freſh oil of almonds and powdered hemlock, of each two drams—of the yellow cerate, one dram. Mix, and make a cerate.

This plan, ſtrictly purſued for the ſpace of a month, greatly mitigated the pains, changed the thin diſcharge into well-digeſted matter, and gave the edges of the ulcer a diſpoſition to heal.

It having been obſerved that this, as well as every other powerful remedy, becomes leſs efficacious by conſtant repetition, the patient was adviſed to omit the hemlock for a week or ten days, and then to purſue it as before; and by this procedure the ulcer, at the end of three months, entirely healed, and no relapſe enſued.

CASE XXXI.

Of a Stone cut from under the Tongue.

THE patient from whom this ſtone was cut, had, about eight years before, been taken with a great cold in a winter voyage; after which, he felt a hard lump in the place whence the ſtone was cut out; and ever afterwards, when he took cold, he felt great pain in that part; but after the cold was over, that part was no more painful than the reſt of his mouth. In the ſeventh and eighth year, it often cauſed ſudden ſwellings in all the glands about the mouth and throat, upon the firſt draught of beer at meals, which would fall again in a little time; at laſt, it cauſed ſudden vertigos, which continued from ſpring to Auguſt, when the part ſwelled at once and diſcharged digeſted matter, which ſuddenly ſtopped by cold, and the throat ſwelled with a great inflammation; it alſo threatened ſuffocation, accompanied with incredible pain, when he ventured to ſwallow even beer, or any liquid thing; and thus he continued for five days, in which time he had as great a flux of ſpittle as if he had taken ſome mercurial medicine: the firſt day the ſaliva ran thin and tranſparent, almoſt like water, and without any bubbles; the ſecond day it ran frothy, and taſted ſalt, which yet the patient thought rather hot than really ſalt, becauſe then the inflammation was at the height; the third day it was exceeding ropy, and a ſmall pin-hole broke directly over the place of the ſtone, and diſcharged digeſted matter as formerly; the fourth day, the ſaliva ran inſipid, ſenſibly cold in the mouth, and a little frothy; the fifth day, which was the day of the inciſion, it ran as on the fourth, leaving an extreme clammineſs on the teeth, inſomuch that they often ſtuck together as if glued.

Upon the inciſion, which proved not wide enough, the membranes or bags, wherein the ſtone lay, came firſt away. The ſtone itſelf was ſo hard as to endure the forceps in drawing it out; it was covered over with a graſſy green matter, which ſoon dried and left the ſtone of a whitiſh colour; it was light in proportion to it's bulk, weighing about 7 grains, and much of the ſhape of an ordinary horſe-bean.

CASE XXXII.

Of the Hooping-Cough.

A Boy, aged five years, had been attacked with a cough at the beginning of February 1774, which, after a week or ten days continuance, was accompanied with hooping; this gradually increaſed in violence and frequency, till the paroxyſms returned at leaſt every quarter of an hour, day and night: early in the diſeaſe, a bleeding at the noſe, and a ſlight expectoration of blood, frequently ſucceeded the hooping and ſtrong efforts in coughing; he was on theſe accounts bled in the arm, with ſome little mitigation of the complaints. On the 26th of February he was very feveriſh, his pulſe was as quick as 148 in a minute, his breathing was confined and ſhort, he had a bloated face, and an emaciated body: he had taken emetics and purgatives; but every evacuation ſeemed to aggravate the diſeaſe, in proportion as it weakened the body.

The following was ordered.

Take of decoction of Peruvian bark ſix ounces—of the paregoric elixir three drams—of tincture of cantharides one dram. Mix and give a ſpoonful and a half three times a day.

On the 26th, he took two doſes of this mixture, and no bleeding at the noſe or expectoration of blood had ſince enſued: on the 27th he hooped leſs frequently than he had done for ſeveral preceding days, and appeared much more chearful; but he refuſed to take any medicine, except a preparation with ſquills, which the father adminiſtered; this purged the child conſiderably, and the complaints again returned with nearly their former violence.

From the 27th of February to the 2d of March, the child had regularly taken the bark mixture; at nights he ſlept better, and the hooping-cough had nearly ſubſided: on the firſt of March, it did not attack him at all; and on the 2d, it only occurred once. The body was regular, and the countenance more natural; but the pulſe was ſtill very quick, and the fever violent: no ſtrangury had yet been complained of.

On the 4th of March, the child was taken into the air, and ſeemed to be gradually recovering.

On the 6th of March, the hooping had not returned ſince the ſecond; ſome cough continued, but with leſs violence; the countenance was more natural, and the appetite better. The mixture was continued, and eight grains of rhubarb taken at bed time: and by the 10th, he was quite recovered.

CASE XXXIII.

Of a Periodical Evacuation of Blood at the End of a Finger.

WALTER WALSH, a temperate man, of a ſanguine complexion and good diſpoſition, was, in the 43d year of his age, ſeized with a great pain all over his right-arm, an exceſſive heat and redneſs in his right-hand, and a pricking in the point of his fore-finger, on which there appeared a little ſpeck, as if a ſmall thorn had run into it; and ſuppoſing it ſuch, he opened it; upon which the blood ſpun out in a violent but ſmall ſtream: after ſpending it's violence, it would ceaſe for a while, and only drop, and then ſpring out with violence again, continuing thus for 24 hours, till at laſt he fainted away, when the blood ſtopped of itſelf, and his pain left him. From that time ever after, he was frequently troubled with the like fits, ſeldom having a reſpite of two months for twelve years, and they never returned oftener than in three weeks. He rarely bled leſs than a quart at a time; the oftener the fits returned, the leſs he bled; and the more rarely they occurred, the more he bled. Whenever the blood was attempted to be ſtaunched, he felt exquiſite tortures in his arm; no remedies proved effectual; he was afflicted with no other diſtemper; neither ſeaſon of the year nor weather affected him. This bleeding was owing to no external accident; only if he drank more than ordinary, he was apt to bleed. Theſe frequent fits brought him at laſt very low, inſomuch that, towards his latter end, he bled but little, and that too like diluted water. He died at laſt of this diſtemper.

CASE XXXIV.

External Application of the Bark.

A Child about four years old, of a healthy conſtitution, had for ſome time laboured under a fever, attended with ſo violent a cough, that more danger was apprehended from thence than from his fever. However, the fever having abated, and, in conſequence of the remiſſion, the cough becoming leſs troubleſome, the bark was ordered; but not being able to get down more than one doſe, and the cough, together with the fever, having returned with as much violence as ever, it was thought a favourable opportunity to try the efficacy of an external application of the bark. Accordingly, a piece of holland was directed to be cut out in the form of a waiſtcoat, (without ſleeves) and for the lining, a kind of callico of an open texture, known to the ladies by the name of callico wrapper. Between theſe cloths were quilted four ounces of bark, groſsly powdered. As ſoon as this laſt fit of the fever and the cough was conſiderably abated, the waiſtcoat was put on the child's naked body. The next day there was not the leaſt return of any ſymptom of the fever; the cough was gone, and the child had no complaint to make, except ſome uneaſineſs from the groſs particles of the bark. Another waiſtcoat was therefore ordered to be made, with the powder as fine as if for internal uſe. This the child wore for a week, when it was renewed, and wore again for ſeven days more. From the firſt application of the medicine in this manner, without any other remedy, the patient was recovered to perfect health.

CASE XXXV.

Of the external Application of the Bark in an Ague.

A Boy, ſeven years and five months old, was ſeized with a regular tertian ague, every attack of which was preceded by an extreme cold fit, of about three hours continuance; and was ſucceeded by a burning heat, which laſted an hour or two, at which time it went off with a profuſe ſweat. When he had been ill about a month, upon taking the bark, ſalt of wormwood, and ſnake-root, his complaints diſappeared for about three weeks, when his fever returned in the ſame manner as before, viz. every other day. But after a while the fever changed it's type, and became a regular quartan. The ſeveral paroxyſms of this diſeaſe were more violent than thoſe of the tertian, as the heat was always more intenſe, the ſweats more profuſe, and attended with violent pains in the limbs. With reſpect to ſtools, his body was in very good order throughout the whole courſe of the diſeaſe; but his urine, when the fever was upon him, was as high-coloured as if it had been tinged with blood.

On Thurſday February the 22d, the fit was very violent, and a phyſician was conſulted.

On Friday the 23d, a waiſtcoat, in which were quilted ſeven ounces of the bark, was, in the abſence of the fever, put upon the child.

On Sunday the 25th, the fever returned, but continued only an hour and a half, or two hours, with very little thirſt; whereas it uſed to continue for eight or nine hours.

On Wedneſday the 28th, he was as well as ever he had been in his whole life.

On the 1ſt of March, the waiſtcoat was renewed, and without the return of any one bad ſymptom, he continued perfectly well.

CASE XXXVI.

Of a Man who lived eighteen Years on Water.

A Young man in Scotland, aged eighteen years, over-heated himſelf on the mountains in purſuit of cattle, and in that condition drank exceſſively of cold water from a rivulet, near which he fell aſleep, and awaked about twenty-four hours after in a high fever. During the paroxyſm of the fever, and ever after that time, his ſtomach loathed and could retain no kind of aliment, except water or clarified whey; which laſt he uſed but ſeldom, there being no ſuch thing to be had, by perſons of his condition in that country, for many months in the year. At the time this account was penned, he was about thirty-ſix years of age, of a middle ſtature, a fair and freſh complexion, with a healthy, (though not ſeemingly robuſt) freſh countenance; his habit of body was meagre, but in no remarkable degree; his ordinary employ was looking after cattle, by which means he needs muſt travel four or five miles a day in that mountainous country.

A gentleman, to whom this man's father was tenant, carried him to his own houſe, and locked him up in a chamber for twenty days, and ſupplied him with freſh water, to no greater quantity in a day than an ordinary man would uſe for common drink; and, at the ſame time, took particular care that it ſhould not be poſſible for his gueſt to ſupply himſelf with any other kind of food without his knowledge; yet, after that ſpace of time, he found no alteration in his vigour or viſage. He uſed no tobacco, yet ſeemed to diſcharge as much ſaliva as others who do not uſe any ſtimulus to provoke that evacuation.

If a judgment might be formed of his inſenſible perſpiration by the ſoftneſs and freſhneſs of his ſkin, he was in that reſpect like other men; and, like them, he ſweated at violent exerciſe. As to the groſſer excrements, no enquiries were made about them; but it was concluded that he diſcharged none, becauſe the country people, who ſtrongly fancied him ſupported by ſupernatural means, would not have forgot to object this to him, if he had evacuated any quantity of groſs fæces, with which water is not charged.

CASE XXXVII.

Of a diſlocated Thigh-Bone.

ON Wedneſday, the 22d of September 1756, a very robuſt, healthy man, of about 34 years of age, compleatly diſlocated his right thigh. The account given of the manner in which it happened was, that being employed in carrying corn from the field in harveſt, and obſerving the waggon, from the unevenneſs of the ground, ready to be overturned, he raſhly attempted to prevent it, by placing his right ſhoulder under the ſide of it, to ſupport the weight; but being overpowered, both the waggon and corn fell upon him. He was taken up inſenſible, and almoſt ſmothered, and carried to the neareſt village, where a ſurgeon came to him about two hours after the accident. He had then recovered his ſenſes, and complained of a violent pain in his right groin, juſt below which was a round hard tumour, which was plainly perceived to be the head of the thigh-bone; this, by it's preſſure on the crural nerve, occaſioned likewiſe a numbneſs downwards, in the parts ſupplied with branches from that nerve. On the outſide from the knee upwards, the bone could not be felt higher than the middle of the thigh; from thence it ſunk in the muſcles and left a hollowneſs, which increaſed gradually to the place diſtinguiſhed in the ſound ſtate by it's particular prominence: there the cavity was large enough to contain a man's fiſt. The limb was evidently about two inches longer than the other, but ſtraddled outwards and forwards, ſo as that it could neither be brought near the other knee, nor into the direction of the trunk; it admitted, however, of being raiſed up towards his body, but not without increaſing his pain. The knee and great toe were turned outwards, but not ſo much as, from ſome deſcriptions of ſuch caſes, might have been expected. The bedſtead on which he then lay was made of thick oak-planks, ſo firmly fixed as to reſiſt any force that could be uſed in making a proper extenſion. The patient was therefore placed acroſs the bed on his back, with his left heel againſt the frame of the bedſtead; where, as it was made to riſe higher than the bedding, in the manner of a bed-board, he had ſufficient foot-hold. The patient's father lay acroſs the bed on his ſon's left ſide, with his feet fixed againſt the bed-ſide; and, by holding him firmly down, aſſiſted greatly in counteracting the extenſion, which was made by three men, with a towel fixed above the knee, upon a napkin folded and rolled on, to prevent the ſkin from being chafed. His right-knee was bent, ſo as that the leg made about a right angle with the thigh; and an aſſiſtant was placed on his knees upon the floor, holding the ancle, with directions, on a certain ſignal, to puſh the leg outwards; by which, as with a lever, the head of the thigh-bone would be twiſted inwards and downwards. The ſurgeon placed himſelf on the patient's right ſide, at the bed-foot, with the palm of his left-hand on the head of the diſlocated bone, and his right near the knee-pan. The extenſion being made gradually and ſteadily by the men who held the towel, until it was thought the bone might be moved, the ſignal was given to the aſſiſtant who held the ancle, which he punctually obeyed; at the ſame inſtant, with a ſmart jerk, the ſurgeon puſhed the head of the bone downwards and outwards, and the knee-pan inwards; and immediately the bone ruſhed into it's proper place, with a ſnap that was perceived by all preſent. The patient was inſtantly relieved, and cried out, 'Thank God, I am well!' As the limb had then recovered it's perfect motion, it was with ſome difficulty he was prevailed on to continue in bed: finding, however, that he had received a bruiſe on his left ancle, at the time of the accident, which had before been overlooked, but now began to be painful, he conſented to remain in bed. There was no appearance of any bruiſe upon the hip, nor any conſiderable inflammatory ſwelling after the reduction: the only application uſed for a few days, was a large double compreſs of linen, wet in verjuice, and moiſtened with the ſame as often as it became dry. After directing the common precautions for preventing an inflammation and fever, the ſurgeon left him. On the Friday following, he ſaw him again, and found him free from fever; his right thigh and leg perfectly eaſy, but his left ancle a little ſwelled and painful. Being uneaſy at his confinement, he was very importunate for leave to get up; but was again diſſuaded, the ſurgeon explaining to him the abſolute neceſſity there was for his continuing in bed until the injured parts had recovered their due tones. It was even neceſſary to tell him, that there was danger of throwing it out again, if he ſhould attempt to walk before the end of a fortnight. But, notwithſtanding this, on the Monday after, he got out of bed, and walked into the yard without any aſſiſtance; declaring, if his left ancle had not been hurt, he believed that he ſhould have been as well able to walk and work as ever. At the end of the fortnight, he returned to his uſual labour, and worked from five in the morning until ſeven in the evening daily, without any inconvenience from his hip, which was not, on any occaſion after, painful; neither did he find the leaſt difference between that limb and the other, in length, ſtrength, or flexibility.

CASE XXXVIII.

Of an extraordinary Hæmorrhage.

IN the month of January, a gardener, about the age of 24, at Wiſbech, in the Iſle of Ely, Cambridgeſhire, happened to receive a ſlight puncture from a ruſty nail in the ſole of his right foot; and, notwithſtanding no tendon or blood-veſſel was wounded, except ſome ſmall branches of veins, the whole foot was immediately ſwelled to a very unuſual degree, without any fever or other apparent cauſe for it. It was alſo attended with great pain, and an extraordinary pulſation upon the part, as in the wounds of arteries; and ſo diſtended, as if the blood would burſt out of it's veſſels. Accordingly, after two days, upon making an opening, in order to enlarge the wound, there ruſhed out immediately ſuch an obſtinate flux of blood, as would not yield to any ſtyptic means longer than the bandage was holden on by ſome ſtrong hand. And although, by this inciſion, no veſſels were wounded but the capillary veins, yet this hæmorrhage continued to ſhew itſelf as violent as at firſt, for ſix days ſucceſſively, whenever the neceſſary means were relaxed. Upon which, for the ſake of revulſion, the patient had a vein opened in the arm of the oppoſite ſide; and it had ſuch a ſudden and ſurprizing effect, that the flux of blood in the foot inſtantly ceaſed, and the wound healed very ſoon without any farther trouble: but the flux of blood, conſequent upon bleeding, became equally as difficult to reſtrain as that in the foot, for the ſpace of four days; all which time it would have continued to flow moſt violently, but for the ſtricteſt bandage, and the ſame application of the hand as before. After this the patient continued well till March following, when he had a violent hæmorrhage for three days from the noſe, preceded by a drowſineſs. From thence he continued well till October, when he bled again at the noſe, as before, for ſeven days. In the middle of March following, the hæmorrhage began to come away from him in ſtools for ſeven days together. Notwithſtanding the uſe of medicines, and in the ſucceeding October, theſe bloody ſtools returned again, and continued ſeven days without gripings. The like returns were obſerved in the ſprings and falls of the four years enſuing: at the end of which time this habitual hæmorrhage left the inteſtines, and broke through the kidneys for ſeven days at the uſual ſeaſons. But, in the December of the fourth year, he had the diſtinct ſmall-pox; which made ſuch a change, that he had none of this periodical hæmorrhage, nor any evacuation equivalent, for the two ſeaſons of the next year; till, in the December then following, it returned by the urinary paſſages for three days only. Again, in the month of May, the next year, it returned, and continued by urine for ſeven days, only the three firſt days the urine appeared but of a coffee-colour. After this, he continued well the following autumn and winter ſeaſon. But in the enſuing March, being nine years after the firſt accident, he got a wound in his leg, which proved like the puncture in his foot, and ſoon after this, falling into violent convulſions for four or five days, he died, in a manner, as if ſuffocated by too great a redundancy of blood.

CASE XXXIX.

Of an Emphyſema, or Inflation of the Skin, occaſioned by the Lungs being wounded.

A Young man, of a ſmall and ſlender form of body, was thrown from a horſe, and thereby received a conſiderable hurt in his ſide, about two o'clock in the afternoon of July the 13th. A ſurgeon being called to his aſſiſtance, found him complaining very much of a pain in his left ſide, which occaſioned a difficulty of breathing, and on that account he immediately bled him. Then he examined his ſide, and found ſo remarkable a ſwelling under the ſkin, that he could not trace, nor even feel the ribs. At firſt he ſuppoſed it an effuſion of blood in the cellular membrane; but ſtaying with the patient ſome little time, he obſerved that the tumour extended itſelf very faſt; and then examining it with more attention, he perceived a crackling noiſe of air under the ſkin when the part was preſſed with the fingers. The quick progreſs of the ſwelling, and this flatulent feel in the part, made him think that it was emphyſematous, and that it was occaſioned by a broken rib, which had pierced the pleura, and wounded the lungs. Accordingly he diſcovered more or leſs of air under the ſkin, almoſt over the whole trunk: but the puffy ſwelling was moſt conſiderable about the place where the patient complained of pain, and where he ſuppoſed the rib or ribs were broken. The difficulty of breathing increaſed in proportion as the ſwelling ſpread itſelf over the body, and as the ſkin became more elevated and tight. He therefore applied to the part thick compreſſes, dipped in vinegar, and ſecured them by a pretty tight bandage, in hopes of ſtopping the progreſs of the diſeaſe.

At ten o'clock at night he bled him a ſecond time, and left him for that night. Early the next morning he viſited him again, accompanied by another ſurgeon; and found him ſo extremely blown up with the air all over his body, that his ſkin was like a drum; and his breathing was become ſo laborious, that he was apprehended to be in great danger.

About ſeven in the evening, a phyſician was called in, who found the patient in bed, panting for breath. His form was that of a human ſkin ſtuffed. The inflation was great and univerſal, except in his hands and feet, where it was very inconſiderable. The ſkin was every where ſhining, as it is when much extended by any kind of ſwelling; and in moſt places was raiſed one, or two, or perhaps three inches, from the ſubjacent muſcles or bone. The air could eaſily be preſſed out from any part, but it immediately returned upon taking off the hand. When ſtruck, his body ſounded like a wet drum; and when preſſed, the air could be felt, and it's ſound diſtinctly heard. The cellular membrane was leſs inflated, and the ſkin leſs diſtended upon his extremities, in proportion nearly to the diſtance of the part from his cheſt. Thoſe parts on the ſurface of the body which have a more looſe and yielding cellular membrane, were proportionably more ſwelled: thence his eye-lids were ſo fixed by their own bulk, that he had not been able to ſee light from a few hours after the accident happened; and the penis and ſcrotum were as much diſtended as they are uſually in the worſt dropſy of thoſe parts.

His breathing was very laborious, (and rather frequent) in the following manner. His inſpiration was ſo ſhort, as to be almoſt inſtantaneous, and ended with that catch in the throat which is produced by ſhutting the valves. After this he ſtrained to expire for a moment without any noiſe; then ſuddenly opening the valve, he forced out his breath with a ſort of inward groan, and in a hurry, and then quickly inſpired again; ſo that his endeavour ſeemed to be to keep his lungs always full. Inſpiration ſucceeded expiration as faſt as poſſible. From the ſmall quantity of air that was inſpired and expired at a time, it was plain, that he either had not room for a greater quantity, or could not bear a greater expanſion of the cheſt. He could not ſuffer himſelf to be turned on his right ſide, but could bear to be ſupported in a ſitting poſture. He ſaid the difficulty of his breathing was owing to an oppreſſion, or tightneſs acroſs his breaſt, near the pit of the ſtomach. He had likewiſe from the beginning a little cough, which exaſperated his pain, and brought up blood and phlegm from his lungs.

To diſcover, if poſſible, whether the cellular membrane was inflated among the more internal parts, as well as under the ſkin, his mouth and the extremity of the gut were examined, all the looſe membrane between the tongue and gums was inflated; but no ſuch ſymptom could be felt within the fundament. His left ſide was alſo examined very carefully, but no diſcovery could be made of any broken rib, nor any thing that indicated the place where the pleura was wounded. The ſkin was indeed ſomewhat diſcoloured near the extremities of the two laſt ribs; and upon moving the blade-bone of the ſhoulder, there was ſuch a particular noiſe, as gave reaſon to ſuſpect that the broken rib lay under that bone. It was then propoſed to open the ſkin below the blade-bone, to give immediate relief, which was approved of; and the patient was very deſirous that any thing might be done which the medical attendants thought might be of ſervice to him.

Accordingly one of the ſurgeons made an inciſion an inch in length. The air ruſhed out with noiſe, as from the mouth of a pair of bellows; and the blaſt continued to be audible for ſome time, becoming gradually weaker and weaker. The ſkin all round towards the wound was then repeatedly ſtroked, and at each time diſcharged a conſiderable blaſt of air. To make this proceſs more eaſy, the patient's ſkin was oiled and the ſtroking then continued, and in a ſhort ſpace of time his bulk was very much diminiſhed. He was ſenſible of great relief from this: from the moſt deſponding ſtate, his ſpirits were immediately raiſed; and the phyſician being ſomewhat fatigued with ſtooping, and having left off, the patient fell to work himſelf, and ſtroked his body upwards and downwards towards the wound with great eagerneſs.

It was then propoſed to give him his ſight; and the phyſician, with his fingers, ſqueezed the air from his right eye-lids towards his temple, and then bid him look up. He opened that eye, ſaw, and was wonderfully pleaſed; but preſently the eye-lids filled again, and were cloſed. From this time, while the phyſician and ſurgeons remained with him, he continued from time to time to preſs the air from his eyes, and looked at them when he ſpoke.

In order to empty the head, neck, and oppoſite ſide, the ſooner, one of the ſurgeons made another ſmall inciſion in the ſkin, upon the right pectoral muſcle, from which a good deal of air was ſoon preſſed out. He then deſired that the air from the penis and ſcrotum might be diſcharged; ſaying, that the bulk of thoſe parts frighted him. A puncture was accordingly made in the ſcrotum, and at the firſt blaſt the part loſt two thirds of it's bulk.

The ſeveral medical aſſiſtants now agreed that he ſhould be well emptied by ſtroaking, and then that a thick compreſs, wet with ſpirits and vinegar, ſhould be applied to all the affected ſide, and bound as tight as he could bear it, and that he ſhould lie on that ſide. This was ordered with a view of preventing as much as poſſible more air getting into the cellular membrane, but this was not done that night, in which, however, he got reſt; but in the morning his difficulty of breathing had increaſed a little, for which he had been bled pretty freely. The wounds were kept open all night, and his friends, from time to time, had preſſed out ſome air; and in the morning the compreſſes and flannel roller were applied. The emphyſema had, however, ſubſided greatly, in the mean time. His eyes were now quite open. Upon ſtroking round his wounds, they ſtill emitted air, but leſs freely than before; both on account of the inflammation which was begun upon them, and becauſe there was little air remaining in the cellular membrane. The patient breathed likewiſe with much more eaſe; ſo that it was concluded he was out of all immediate danger, and that the remaining emphyſema would go off gradually by the air's being deſtroyed, or abſorbed. It was therefore agreed that his caſe was now to be conſidered as a broken rib, with wounded lungs; and that in the future treatment inflammation and ſuppuration in the cheſt were to be guarded againſt.

His difficulty of breathing and cough (with which from time to time he brought up ſome blood and viſcid phlegm) continued to be ſo very troubleſome, that he was bled three times more in the courſe of a week after this. He took nitre and pectoral emulſions, then aſſes milk, and went into the country. The emphyſema was quite gone in a few days, and in about two months he was in all reſpects well.

CASE XL.

Of a Gangrene ſtopped by the Bark.

A Man, about 35 years of age, of a melancholic, ſcorbutic habit, drawing a charge of powder out of a fowling-piece and unwarily clapping the palm of his right-hand on the muzzle, the piece happened to go off; he received a wound through the middle of his palm, extending wide and deep between the thumb and fore-finger, whereby the veſſels and tendons were lacerated. The hæmorrhage was immediately ſtopped, and his hand dreſſed. For ſome days the patient had a grievous pain, with a large ſwelling and inflammation in all his fingers, except the thumb, and all over his hand and arm; and the wound diſcharged only a large quantity of thin matter, at firſt of a bloody, and afterwards of a duſkiſh colour, and ſomewhat fœtid: the wound itſelf was alſo of a blackiſh colour, ſpread farther every day, and the ſwelling, inflammation, and pain, were ſcarce diminiſhed, though recourſe was had to the uſual remedies in ſuch caſes. But on the eleventh day from the accident there flowed ſpontaneouſly, at four ſeveral times in the ſpace of twenty-four hours, ſome ounces of blood, which likewiſe twice ſtopped ſpontaneouſly, and was twice ſtaunched by applying ſpirit of turpentine, and compreſſing the hand. And now the lips of the wound plainly appeared mortified; and the actual cautery ſeemed to be the laſt reſort, both for ſtopping the hæmorrhage and the progreſs of the mortification, ſince the one baffled fomentations and cataplaſms, and the other bandages. But if the cautery ſhould not ſucceed, recourſe muſt be had to amputation; and how doubtful a remedy even this is in bodies of ſuch a habit, is ſufficiently evident from experience. In order to avoid both, he was adviſed to try the bark, of the efficacy of which he had then heard a great deal. On the twelfth day, therefore, two ſcruples of the bark were given in the morning, and repeated every four hours. The next morning, after the patient had taken half an ounce of it, the pain was very much abated, the ſwelling of the hand fallen, and a little matter obſerved about the lips of the wound, within the bandage; and the edges, which the day before were black with the mortification, now ſeemed to begin to ſeparate. The fever likewiſe, which at firſt was no ways violent, yet pretty ſenſible when the hæmorrhage encreaſed, now entirely ceaſed, the urine depoſiting a little ſediment of a dirty or whitiſh yellow. The uſe of the bark was continued in the ſame manner for two days; and afterwards, for two days more, it was taken thrice a day; and for three days more, only twice a day; ſo that there were two ounces of it given in one week. In the mean time, the ſwelling and inflammation vaniſhed, digeſted matter flowed from the wound, the fleſh grew up underneath; and the pain, which yet continued pretty ſharp in the part when the patient moved it, was much abated. For three weeks after, he was very well, only that he had rheumatic pains (with which he was uſually troubled in winter) ſometimes in his foot, and ſometimes in the ſhoulder, and one or both ſhoulder-blades, accompanied with a ſwelling; he was free of a fever, and had an appetite for proper food. But afterwards, on the 19th of December, his appetite became weaker; the pain in the bones of the hand, together with the ſwelling, increaſed; which ſeeming to heighten the day following, the pulſe became ſomewhat quicker on the third day, and the ſwelling of the hand, together with an inflammation, threatened an abſceſs, while there flowed a white matter from the wound, and in the ſame quantity as before. But, on the fourth day, the lips of the wound ſwelled with veſicles, tended to a gangrene, with a plentiful diſcharge of thin humour without any matter; and the hand was enflamed, and in much pain. The bark was therefore given in the ſame manner as before; and within the ſpace of eight hours, the patient having ſcarce taken three doſes, the pain, which before was very ſharp, was eaſed as by a charm; and at the next dreſſing, the ſwelling of the hand ſeemed to be abated one half, and a good digeſted matter was diſcharged from the wound. The urine, which on this return was at firſt of a pretty deep colour, became gradually lighter, with little or no ſediment. After this, to prevent a relapſe, he took two ſcruples of the bark twice every day, for three days; and after that, half an ounce of the bark every week, for ſix weeks; and at length, after four months, this tedious cure was compleated.

CASE XLI.

Of the Uſe of Bliſters in Palſies of the lower Extremities, and Incontinence of Urine.

GEORGE WOOD, a taylor, aged 32, was admitted into the London Hoſpital on the 5th of July, and gave the following account. That near two years before, after over-heating himſelf by exerciſe and drinking cold water to cool him, (which he had done very frequently) he was ſeized with a violent pain in his head, and in the ſmall of his back, which continued about eight days; when a very great raſh broke out all over him, and the pains went off. In order to be cured of the raſh, he applied about a month afterwards to a famous empyric, who gave him four pills, of which he took one each morning. The pills vomited and purged him exceſſively; nevertheleſs, he applied to him again in a week's time, and got four more, to be taken in the ſame manner. He took two of theſe, the laſt of which operated with ſuch violence, that his friends thought it would have killed him, and therefore he took no more of them. Soon after his raſh diſappeared, but the vomiting, cauſed by the pills, continued very frequent for three months, attended with great coſtiveneſs. His limbs became very weak, ſo that he could hardly walk, and this weakneſs gradually

dually increaſed, till he loſt entirely the uſe, together with the ſenſe of feeling in them: they were alſo very much waſted. This palſy happened about a year before his admiſſion into the hoſpital, at which time he was ſeized with a ſuppreſſion of urine, which (in ſpite of every thing he took to remove it) laſted four days, attended with great diſtenſion of his belly, and exceſſive pain. At the end of theſe four days, his urine came away involuntarily, and ever ſince had been continually dribbling from him. His coſtiveneſs became ſo obſtinate, that he never went to ſtool without taking ſome purging medicine. He was generally eight, ten, or twelve, and once fifteen days, without one.

He was at firſt ordered to take two ounces of *tinctura ſacra* immediately, and a ſpoonful every night and morning, or occaſionally, to keep his body open; and half a dram of bark, with the ſame quantity of valerian, to be taken three times a day. Four days afterwards, (theſe medicines producing no alteration, excepting that he had ſome ſtools by means of the *tinctura ſacra*) a large bliſter was directed to be applied to the region of the *os ſacrum*, at the lower extremity of the backbone; the effect of which was ſo great, that in leſs than twenty-four hours he could retain his water above an hour at a time; and in a week he could retain it for two hours. The incontinence of urine gradually diminiſhing, he was able, on the 27th of Auguſt, to retain it for five hours at a time, and was ſoon perfectly free from it.

The effect of the bliſter too was ſo remarkable upon his paralytic limbs, that he got warmth and feeling in them the next morning after it was applied; but complained much that his legs were frequently drawn up, and that he could not keep them ſtill, whatever efforts he uſed for this purpoſe. This motion in his limbs, however irregular or involuntary, was a favourable ſymptom; but the ſpaſms continuing to be troubleſome, though not ſo frequent, another bliſter was applied; upon which they ſoon ceaſed, and his paralytic ſymptoms were conſiderably abated, though, at the time this caſe was drawn up, they were not perfectly removed.

CASE XLII.

Of a Fork put up the Fundament, and extracted through the Buttock.

AN apprentice to a ſhip-carpenter in Great Yarmouth, about 19 years of age, had violent pains in the lower parts of his belly for ſix or ſeven months; it did not appear to be any ſpecies of the colic, but he ſometimes made bloody urine, which induced an apothecary and ſurgeon, to whom he applied, to believe it might be a ſtone in the bladder. The patient was very little relieved by phyſic; at length a hard tumour appeared in the left buttock, two or three inches from the verge of the fundament, ſloping a little upwards. A ſhort time after, he voided digeſted matter by the fundament, and that every day for ſome time. The tumour at length broke, and the ſurgeon ſuſpected a fiſtula, but could not introduce the probe by the orifice of the ſore into the ſtrait gut. Shortly after, the prongs of a fork appeared through the orifice of the ſore, upwards of half an inch beyond the ſkin, upon which the patient's violent pains ceaſed. The ſurgeon divided the fleſh between the prongs, and after that made a circular inciſion about the prongs, and ſo with a ſtrong pair of pincers extracted the fork, handle and all, entire, but not without great difficulty. The end of the handle was beſmeared with the excrements; the fork was ſix inches and a half long, the handle ivory, but tinged with a very dark brown colour; the iron part was very black and ſmooth, but not ruſty. The patient recovered in a ſhort time.

The patient told a relation of his how this came about; viz. that being coſtive, he put the fork up his fundament, thinking by that means to relieve himſelf; but unfortunately it ſlipt up ſo far, that he could not recover it again; and he added, he had no trouble or pain till a month or more after it was put up.

CASE XLIII.

Of a ſingular Colic.

A Man of forty years of age, of a bilious and ſcorbutic habit, for a long time greatly laboured under colic pains, eſpecially in the lower region of the belly, beſides continual and troubleſome flatulencies. About two or three years before his death, he had bilious and very fœtid ſtools, which appeared full of matter, and ſometimes with bloody clots; and ſo frequent, that very often he would go to ſtool twenty times in three or four hours, with his teneſmus, or inclination to go to ſtool, ſtill upon him. At length there broke out fungous, livid and black caruncles, or warty nodes, ſome of which were at leaſt as big as a nutmeg. But however frequent his going to ſtool generally was, yet ſometimes, eſpecially in the height of the diſorder, he would be very coſtive, and in exquiſite torture, ſo that there was a neceſſity of uſing either clyſters or cathartics; and at times the patient would, as if ſtarved, greedily devour whatever was given him, and again nauſeate the moſt exquiſitive dainties. He became daily more emaciated; his urine was always bilious, and in leſs than the common quantity; and his countenance wan, and often of a yellowiſh caſt. He bore his long and painful illneſs with the greateſt reſolution, till at length a puffy ſwelling in his feet, a delirium, a ſunk and hollow countenance, and cold and clammy ſweats, (the certain preſages of death) came on.

Different preparations of ipecacuanha were preſcribed by ſeveral of the moſt ſkilful and celebrated in the whole profeſſion; as well as emetics, ſtomachics, deobſtruents, incarnatives, balſamics, and all ſorts of aſtringent clyſters; but all were ineffectual, only that laudanum gave the patient ſome ſhort relief. The Briſtol, Bath, Spa, and Pyrmont waters, and a long continued and exact milk and vegetable diet, were all tried to no purpoſe, though for a few days he ſometimes would ſeem a little refreſhed.

CASE XLIV.

Of a Feather ſwallowed by a young Lady.

A Young lady, who had been long ſubject to violent head-aches, which ſometimes deprived her of her reaſon, was ſuddenly attacked with a ſevere fit of this diſtemper, upon the death of a favourite brother; and, to add to her diſtreſs, ſhe had the misfortune to ſwallow a feather, which ſhe had thruſt down her throat to provoke vomiting.

Thoſe about her made ſeveral attempts to extract it with their fingers; but theſe not anſwering expectation, ſhe drank warm water, and vomited plentifully without diſcharging the feather. A ſurgeon was then ſent for; who being made acquainted with the circumſtances of the caſe, deſired the aſſiſtance of a phyſician on this preſſing emergency.

As it was the third or fourth feather of a gooſe-wing, whole and entire, without any part being cut off, it was agreed that all poſſible means ought to be employed without delay to extract it, as fatal conſequences were to be apprehended from ſo ſtubborn and indigeſtible a body getting into the ſtomach: and the phyſician having mentioned the ſponge, and the whalebone, among the inſtruments which might be wanted, the ſurgeon objected that this would more probably puſh it down than bring it up; but he immediately retracted his opinion, when it was obſerved to him, that the largeſt end of the ſhaft being uppermoſt, the ſlanting poſition of the threads which compoſe the web might readily allow the inſtrument to paſs beyond them, and catch hold of the ſponge as it was drawn back again; more eſpecially, if the ſponge was introduced dry, and permitted to ſwell by imbibing moiſture in the gullet.

After having conſidered the affair attentively, the phyſician and ſurgeon went to the patient's lodging, furniſhed with all the proper inſtruments they could poſſibly ſtand in need of; and particularly with a long, flexible whalebone, to each extremity of which a piece of ſponge was fixed, with two ſtrings reaching betwixt each. The ſtrings were added to the inſtrument by an ingenious practitioner ſome years ago, when he had occaſion to uſe it, that he might have it in his power to extract the ſponge, in caſe it ſhould break looſe from the whalebone in the gullet; and it was readily perceived they might be of ſingular ſervice in the preſent caſe, by laying hold of the web, if the whalebone was turned round it's axis.

At their arrival, they found the patient not very clear in her ſenſes, ſo that ſhe was incapable of giving a diſtinct account of what ſhe felt; nevertheleſs, ſhe complained of an uneaſineſs in the right ſide of her neck, though ſhe drew her breath eaſily, and ſwallowed without any great difficulty.

An attempt was firſt made, by depreſſing the root of the tongue, to inſpect the entrance of the gullet, and try if any part of the feather could be ſeen or reached with the fingers; but this being to no purpoſe, the ſurgeon introduced the ſmalleſt end of the above-mentioned inſtrument into the left ſide of the throat, to avoid puſhing down the feather, which there was reaſon to apprehend was lodged in the right ſide of the gullet; and having thruſt it far down towards the ſtomach, he began to make the extraction by ſlow degrees, inclining the end of the inſtrument he held towards the left ſide, and twiſting it round repeatedly, that the ſtrings might have a better chance to take hold of the feather.

This firſt attempt, as well as a ſecond made in the ſame manner, proved unſucceſsful; but the third time, the ſurgeon having introduced the largeſt end of the inſtrument as far down into the gullet as poſſible, was fortunate enough to bring up the feather with it into the entrance of the paſſage, from whence he extracted it with his fingers about two hours after it had been ſwallowed.

The lady was bled largely that evening; ſhe afterwards had a clyſter injected, and bliſters applied to her ancles: notwithſtanding theſe precautions, her throat was enflamed ſo much the next day, as to prevent her ſwallowing, which made it neceſſary to repeat the bleeding, and to preſcribe nouriſhing clyſters; after which the inflammation ſubſided, and the patient ſpeedily recovered.

CASE XLV.

Of the Effects of a ſmall Quantity of Arſenic.

A Lady finding ſome arſenic among other things for the uſe of the family, and not knowing what it was, put a little of it into her mouth, as people commonly do when they would diſcover things by their taſte. Soon after, ſhe was informed what it was; but being, as ſhe thought, certain that ſhe had ſwallowed none of it, ſhe could not be prevailed upon to uſe any precaution, and felt no inconvenience for twelve hours. But at the end of that time, ſhe became ſuddenly giddy; and being carried to bed, her body was all over ſo convulſed, that the bed and chamber ſhook with the violence of her motions. About four hours after this attack, a phyſician was called in, who finding the patient in this condition, that it was too late to give her a vomit, and that ſhe neither complained of any diſorder in her ſtomach or bowels, he gave her as much oil of ſweet almonds as ſhe could bear; and ordered an injection of olive-oil, by way of clyſter, which brought off a number of hard excrements, of the ſhape and figure of ſheeps-dung, and of as deep green a colour as capers; and this injection was repeated till the clyſter came away as it was injected, without any of theſe excrements.

The convulſions, and frights in her ſleep, procured by liquid laudanum given in emulſions, ſtill continued; and ſhe awaked frequently with ſuch ſtartings, that had not a perſon in the bed held her firmly, ſhe would have been thrown out of it. In this condition ſhe remained a whole day and night.

The day following, her body, but eſpecially her head, face, and neck, were all covered over with red ſpots like meaſles, with exceſſive glowings; and ſhe had the tingling in her ears. Her other ſymptoms, however, began to abate.

To advance the eruption, and, by this means, to carry off the internal diſeaſe, diaſcordium and volatile medicines were adminiſtered; by the uſe of which, ſhe recovered of all the ſymptoms from poiſon in five or ſix days, but remained deprived of an excellent conſtitution ſeveral years.

CASE XLVI.

Of the good Effect of Magneſia in violent Vomitings.

A Woman, aged 34, the mother of ſeveral children, was taken, in the fourth month of her pregnancy, with violent vomitings; which growing daily worſe, notwithſtanding the endeavours of her apothecary to reſtrain them, brought on at the end of a month ſuch ſevere pains in the ſtomach, and ſpaſms in her belly, as to occaſion abortion. The vomitings were not leſſened by this event, but grew worſe; and frequently occaſioned general convulſions to ſuch a degree, that ſhe was many times ſuppoſed to be at the point of death.

Scarce any medicine ſtaid with her; ſhe brought up almoſt inſtantly whatever was given her as nouriſhment, either in a ſolid or liquid form. She was exceedingly pale, and very much emaciated; her fleſh was cold to the touch; and though her urine was little in quantity, it was perfectly limpid. She had a continual thirſt, and was in a conſiderable degree coſtive. Her pulſe was alternately ſlow and quick; and ſhe was frequently tormented with the hiccough. The pain in her ſtomach was ſevere, and conſtant; and whatever ſhe brought up, was acrid to ſuch a degree, as to make her mouth and throat very ſore. Theſe parts, upon examination, appeared high-coloured, and in many places excoriated; and the pain ſhe felt in her ſtomach, upon ſwallowing any liquor that had the leaſt degree of acrimony, or was more than lukewarm, made it probable the ſtomach itſelf, in it's internal ſurface, was affected in the ſame manner.

In this wretched ſtate, a phyſician was conſulted, who was at firſt much at a loſs how to relieve a patient ſo debilitated, and whoſe ſtomach was in ſo diſeaſed a ſtate that it ſeemed incapable of retaining any appropriated remedies long enough to correct the acrimony of the juices and reſtore the ſecretions to a more mild and natural ſtate. Anti-emetics of various kinds had been tried without effect, particularly ſaturated ſolutions of alkaline ſalt in juice of lemons. Stomachic medicines of the warm and aromatic kind ſhe could not bear, on account of their poignancy; and though nothing could ſo ſpeedily correct the almoſt cauſtic acid as ſolutions of alkaline ſalts, neither the entrance to the paſſage, or the gullet, could bear their acrimony.

All expectations of relieving this patient, ſmall as they were, depended upon being able to neutralize, and thereby leſſen the ſtimulus of the acid of the ſtomach. To accompliſh this was not very eaſy, as no medicine in ſmall doſes could in any conſiderable degree correct ſo intenſe an acid; and, in the preſent ſituation, it was difficult to get any medicine to ſtay long enough to exert it's effects. To diſcharge, however, what acid matter might be already accumulated in the ſtomach, the patient was directed to drink plentifully of ſmall, warm, unſalted mutton-broth; and vomit with it ſo long, that it ſhould be diſcharged with no other taſte than that of broth. This was complied with, and a large quantity drank. The pain in her ſtomach ceaſed upon this for more than two hours, and was after that time apparently coming on with the ſame violence as before. Upon which, a dram of magneſia was ordered to be given in two ounces of veal-broth. This kept down, and eaſed her; it was therefore directed to be repeated as often as the pain returned, without any regard to the quantity that the whole might amount to, ſuppoſing that the pain continued ſevere. This was done; and in three days ſhe took three ounces of magneſia, of which very few doſes were vomitted up, and ſhe was purged conſiderably.

This medicine was continued, in a ſomewhat leſs quantity, for three days longer, in which ſhe took two ounces more of magneſia. By this time the vomitings ceaſed, the convulſions left her, ſhe had no pains in the ſtomach, and her mouth and throat loſt their intenſely red colour and ſoreneſs; nor did even her eructations longer indicate any acidity.

Beſides veal-broth, ſhe was allowed boiled rice, and now and then ſome rice-gruel, with a ſmall quantity of brandy; and, after a few days more, ſhe could retain boiled chicken, and other light ſolid animal food.

When her ſtomach was in this ſtate, ſhe took liberally of the decoction of Peruvian bark, with a ſmall portion of French brandy; by which, and her nouriſhment, ſhe recovered her ſtrength ſurpriſingly. To this medicine, as ſhe was during the latter part of her illneſs conſiderably dropſical, were added ſome preparations of ſteel; and in about a month ſhe perfectly recovered.

When this patient's ſtomach was relieved, the thirſt, the general and partial ſpaſms, and other complaints, which were merely ſymptomatic, ſoon ceaſed; and what remained of her cure was by no means difficult.

CASE XLVII.

An uncommon Swelling of the Knee.

A Countryman had, for ſeveral months, an uneaſineſs in walking, from a pain in his left knee, which had received no obſervable injury. When the pain was greateſt, he found ſomething of a hard body immediately under the bending, generally at the inſide of the leg, though ſometimes at the oppoſite; and could get no eaſe, till, by chafing it upwards with his hand, he made it diſappear. The parts about it were enlarged, as in the caſe of a white-ſwelling at this joint, though to no great height: the hard body always made it's appearance upon walking; ſo that, when a ſurgeon came to ſee him, the patient was obliged to take ſome turns through the houſe before he could make him ſenſible of it; he then eaſily caught it between his thumb and finger, where it was felt ſo diſtinctly that he ſuppoſed it had it's ſeat immediately under the ſkin, which induced him to pull out an inſtrument to open into it; but the patient, not having reſolution to ſubmit to the operation, pleaded for ſome days delay, to conſider of it; after which, he came to the ſurgeon's houſe, with ſome of his friends, and acquainted him that he was ready to undergo it, as he was perpetually upon the rack, by the falling down, as he called it, of that body, which happened every moment of the day when he offered to ſtir. It appeared ſo looſe and ſuperficial, that the operator had no manner of doubt of ſucceſs; and, with a proper knife, immediately began to make an inciſion upon the body, which, in the mean time, he held between his finger and thumb; but, to his great ſurprize, when he had made his firſt inciſion through the ſkin and fat, he found a membranous ſtrong bag between the inſtrument and the tumour, which made him ſenſible, for the firſt time, where this floating body was lodged: however, though he now conſidered the operation as more important than formerly, he was ſatisfied nothing elſe could help the patient but continuing the inciſion, which he did; and, upon entering the bag, there were at leaſt four ounces of a thick pellucid humour iſſued out with the hard body, which he found much of the ſhape, though larger than a kidney-bean. It then appeared wholly cartilaginous, and very ſmooth and protuberant; but, upon drying, it ſhrunk in, and ſhewed itſelf a bone covered over with cartilage. In cutting through the bag, which was firm and thick, the patient expreſſed the utmoſt pain, which abated upon taking out the body; and after the evacuation, the patient was earneſtly deſired to ſtay in town that night, that his ſurgeon might more conveniently attend him, but nothing would perſuade him; ſo that, after ſome hours ſtay, he mounted his horſe, and rode in the night two miles into the country, in a ſevere froſt, which raiſed the pain of his knee to the greateſt height, and obliged him to ſend expreſs for the ſurgeon at midnight, who ordered the part to be fomented with the moſt anodyne ſoftening materials he could recollect, but with little ſucceſs: his knee ſwelled exceedingly all round; and, what was obſervable, he did not make ſo much complaint of the place where the inciſion was made as at the oppoſite ſide. He was bled and purged with calomel frequently, but all to no purpoſe, being, notwithanding all that could be done to him for a month's time, ſeldom free from ſuch pain as occaſioned horrid cries and complaints; nor could he ſuffer his leg to be moved in the moſt gentle way, or take any reſt but what was procured by opiates. Bladders of water round his leg, as warm as he could bear, had little influence; but water, ſyringed, took more effect, which two men were employed by turns in doing for near an hour at a time, from a large clyſter ſyringe; but though this occaſioned an abatement of the pain and ſwelling, yet it did not carry it quite off, till a cauſtic was applied to the outſide of the knee; which being kept running, and the ſyringing continued, it gradually wore off in about a year's time, ſo that he remained quite free of all complaint and ſwelling, and walked about without any impediment.

CASE XLVIII.

Of a Locked Jaw.

A Soldier, aged 23 years, of a thin make, but healthy conſtitution, on the 15th of January 1762, was wounded in the arm with a cannon-ſhot. An excellent ſurgeon (to whoſe great attention and abilities this man principally owed his cure) having examined the wound, judged amputation neceſſary; but the head of the ſhoulder-bone was ſo much ſhattered, that he was obliged to amputate at the articulation of that bone with the blade-bone. He ſaved as much of the ſkin as poſſible in the operation. The wound digeſted, and looked well; but as the diſcharge was great from ſo large a ſurface, the patient was put upon a courſe of the bark; notwithſtanding which, by the eighth of February, he was much reduced in his ſtrength. About that time the granulations that had been red and pointed, became pale, ſmooth, and glaſſy, and the diſcharge grew thin and fœtid. On the 9th he was removed from the hoſpital-ſhip into an hoſpital. On the tenth (which may be reckoned the firſt day of the locking of the jaw) he complained of a ſtiffneſs of his neck and jaws. Theſe parts were fomented, and afterwards rubbed with oil in which a ſmall proportion of camphire was diſſolved. The next day (the ſecond) theſe ſymptoms increaſing, a phyſician was deſired to viſit him. His jaws were locked; his neck and the whole ſpine were rigid; his pulſe was but little changed from that of health. The rigid parts were fomented; and afterwards embrocated with the camphorated oil and thebaic tincture. This was done twice a day through the courſe of the diſeaſe. The wound was dreſſed with a poultice of bread and milk only. His body was kept open by a clyſter adminiſtered occaſionally. His diet was water-gruel, panada, and broth, with an allowance of wine. He was ordered the following bolus.

> Take of Venice treacle one ſcruple—of muſk, ten grains—of opium, one grain—of ſimple ſyrup, enough to make a bolus. To be taken every third hour.

On the third, the rigidity was greater. He ſwallowed with difficulty: the medicine was therefore changed for one in a liquid form.

> Take of muſk julep eight ounces—of liquid laudanum, half an ounce. To be taken by a ſpoonful at a time.

He conſumed this quantity daily till the 6th, when the ſpaſms had abated conſiderably; but nauſeating the medicine, he took one grain and an half of opium every fourth hour. On the 7th, his jaws were more fixed, and two grains of opium were then adminiſtered ſix times a day. On the 8th, the ſpaſms had increaſed to ſuch a degree, that he could not ſwallow the pills of opium; he was therefore ordered eight ounces of the muſk julep, with one ounce of the thebaic tincture, to be taken in twenty-four hours. On the 9th, he was much worſe; the ſpaſmodic pain at the point of the ſtomach, which always accompanies this diſeaſe, returning frequently with more violence, and ſtriking ſuddenly from the breaſt to the back, brought on the *opiſthotonos*, with the cynic ſpaſms, and it's other attendants. The convulſions, the heat of the weather, and poſſibly the medicines, all contributed to keep him in a conſtant ſweat. Half an ounce of muſk rubbed down with ſugar, and a dram of opium, were mixed in a pint of common julep, of which he took two ſpoonfuls at ſuch intervals as to conſume the whole in twenty-four hours. He continued this mixture till the 13th, when, being much better, the quantity was leſſened by a fourth part. The wound having a good appearance, was dreſſed again in the common way with dry lint. On the morning of the 15th, continuing to recover, he was ordered to take the laſt mixture with only half the quantity of the muſk; but his nurſe neglecting to give it in the night, the next day (the 16th) his jaws were again conſiderably locked: however, upon once more taking the medicine regularly, he was, by the 17th, much relieved. On the 19th, being free from all ſpaſmodic complaints, he was ordered to take the opium alone, which he did in leſs quantities, and at greater intervals, till the 8th of March, when he firſt left it off entirely. On the 24th of March the wound was cicatrized, and the patient in every reſpect well.

CASE XLIX.

Of an extraordinary Cure of an Epilepſy.

A Woman, about 38 years of age, had laboured twelve years under an epilepſy, which, from one fit a month, was come to four or five violent ones every day, each continuing an hour, or an hour and a half, by which ſhe was rendered mopiſh and ſilly, and incapable of taking care of her houſe and family. Her huſband was reduced in his circumſtances, from his affection and care for her, having got and followed all the advice he could. Evacuations of all kinds had been tried; the epileptic and cephalic tribe of medicines had been ranſacked; and many others had been uſed in vain, the diſeaſe growing more ſevere. Her fit always began in her leg, toward the lower end of the calf, and in a moment reached her head, threw her down foaming at the mouth, with terrible diſtortions of the mouth, neck, and joints. A ſurgeon being at length conſulted, ſhe fell down in a fit whilſt he was talking to her; and he immediately examined the leg, and found no ſwelling, hardneſs, laxneſs, or redneſs, nor any appearance in that place different from the other leg: but ſuſpecting, from her fit beginning always at that part, that the cauſe of her diſeaſe lay there, he immediately plunged a knife about two inches into it, and found a ſmall hard body, which he ſeparated from the muſcles, and then took it up with a forceps. It proved a hard cartilaginous ſubſtance, or ganglion, about the ſize of a very large pea, ſeated on a nerve, which he cut aſunder, and took out the tumour. She inſtantly came out of the fit, cried out ſhe was well, and never after had a fit, but recovered her former vigour both of body and mind.

CASE L.

Of a Salivation ſuddenly checked by Cold.

CAPTAIN V—— a Dutch officer, of about 24 years of age, and of a naturally active diſpoſition and healthy conſtitution, was ill of a fever, with an inflammation in his eyes; and complained very bitterly of a violent pain in his hands, wriſts, and feet, but with very little ſwelling, and no diſcolouring of the parts, and which he had been informed was the gout, for which reaſon he had borne it patiently for above three months, thinking that nothing either could or ſhould be done in that caſe; but finding that he was extremely feveriſh, he now deſired the aſſiſtance of a phyſician, who proceeded to treat him in the manner which he thought moſt ſuitable to his different complaints; by which he ſoon got the better of his fever, and of the inflammation in his eyes: but notwithſtanding all his endeavours, the pains ſtill continued equally ſtrong and immoveable; and though he made uſe of every remedy or application he could think of, none of them gave him any relief, or ſeemed to make the leaſt impreſſion upon his diſorder; till at laſt, aſking him one day, whether, over and above the medicines ordered him, he was taking any mercury, (a ſuſpicion of which aroſe from his breath) he proteſted he had taken nothing of that kind for near four months paſt; but that he had ſome ſhankers and a gonorrhœa four or five months before, for which, indeed, he had been taking ſome mercurial pills, which, contrary to the intention of his ſurgeon, had thrown him into a gentle ſalivation; but that the ſpitting had been ſuddenly ſtopped by the exceſſive cold weather he had been expoſed to one day on a march from Newcaſtle to Hexham, where the king's troops ſuffered extremely by the hard weather; and that his feet and hands were then ſo benumbed with cold, that he thought he ſhould never recover the uſe of them; but that, as they grew warmer, the numbneſs went off, and was ſucceeded by an excruciating pain, which had never left him ſince that time. Upon this diſcovery, ſome pills were ordered with guaiacum, to be taken morning and evening, with one grain of calomel in each doſe, and to be waſhed down with a draught of warm decoction of the woods. This he continued for four days, when, after having taken only ſeven grains of calomel, he fell into a very plentiful ſalivation, upon which the pains remitted, and the ſwelling of his limbs ſubſided; ſo that, in a few days, he was perfectly cured, and the ſalivation was ended in a very little more than a fortnight.

CASE LI.

Of an Aneuriſm, occaſioned by an unſkilful Bleeding.

A Countryman had the misfortune, in being bled in the baſilic vein of the right arm by ſome gardener, to have his artery hurt, which was followed by an aneuriſm. More than a year after the accident, he was received into an infirmary; and the ſurgeon in attendance performed the operation. After the tourniquet was applied, he laid open the tumour from one end to the other, with one longitudinal inciſion; then taking out the polypous ſubſtance, and a ſmall quantity of liquid blood, the ſmall aperture of the artery was ſo plainly ſeen, that a phyſician, who was preſent, put a probe into it, and raiſed the trunk of the artery, while the ſurgeon paſſed the needle behind it, the ſides of the wound being held aſunder in the mean time by two blunt hooks. The proper membrane of the tumour was conſiderably thicker and ſtronger than uſual, and required force to puſh the blunt aneuriſm-needle through it; but the nerve was preſſed by the tumour a good way from the trunk of the artery, ſo that there was no danger of taking the nerve within the ligature. After making the ſuperior ligature, the tourniquet was untwiſted, but no blood came by the orifice; the ſecond ligature was, however, made below the orifice, for ſecurity; the cavity was filled with ſoft lint, and the other ordinary dreſſings applied. That afternoon his hand ſwelled, and became warm, which removed all fears of the circulation being entirely ſtopped. No pulſe was to be felt on either ſide of the wriſt for ſeveral days; but in about twelve days, when both the ligatures ſuppurated off, the pulſe was plainly to be felt on both ſides of the wriſt, and the cure was ſoon compleated, the patient having as much ſtrength and motion in that whole member as ever.

CASE LII.

Of three different Growths of Teeth ſucceeding one another.

A Child of four years old, in the month of July, was taken ill of the meaſles; ſhe had a large eruption, but recovered, without much danger through the diſeaſe. Three days after the criſis, ſhe was ſeized with a violent fever, and complained of a particular uneaſineſs in her teeth; ſoon after her face was ſwelled, ſo that it was with a good deal of difficulty that ſhe opened her mouth. At firſt, the ſwelling was conſidered as a ſymptom of her having caught cold, for which ſhe took ſome medicines, which brought on a plentiful perſpiration; but the ſwelling of her face ſtill kept up, and at a week's end ſhe complained of the ſoreneſs of her teeth being increaſed. A ſurgeon was then ſent for, who examined her mouth, which exhaled a very fœtid ſmell; he perceived a ſlough on the left ſide of the palate, and the gums of her upper jaw, which, though ſhe took a decoction of the bark, and uſed detergent gargariſms, increaſed ſo faſt, that the next day the gum of the lower jaw was affected round the grinders. She was now exceedingly emaciated, coughed frequently, had hectic heats and nocturnal ſweats, for which ſhe was removed into the country, where, with a milk diet and the bark, ſhe grew a little better; and by the uſe of the gargle, in a fortnight, the ſlough ſeparating, left half of the palate-bone bare and foul for the breadth of a ſixpence, cloſe to the teeth, which were quite looſe in the upper jaw; and on the ſeparation of the gum from the lower jaw, the teeth were ſo very looſe, that on touching, two of them followed her finger. The bark and gargariſms were continued, and a doſſil of lint, dipped in the gargle, introduced between her cheek and jaw. This method was perſiſted in, an exfoliation being expected; and in ſix weeks the ſurgeon having hold of the ſecond grinder, which was very looſe, as he moved it, a large portion of the jaw (more than he expected) moved with it; and on the child's ſuddenly withdrawing, the exfoliated piece of jaw, with two teeth, ſeparated, and expoſed to view two ſmall white teeth, like thoſe of an infant that have newly cut the gum. The face was kept warm, and a doſſil conſtantly in her mouth, moiſtened with red Port and water, with a little tincture of myrrh. During this time the gum of the lower jaw was not in the leaſt grown up, and the jaw and holders became yellow, notwithſtanding they were kept conſtantly defended with wax. The ſecond tooth of the grinder in the lower jaw, which had been long looſe, ſhe complained hurt her upper jaw whenever her mouth was ſhut, and moved the new teeth when it was not covered with lint. But there were objections againſt taking it out, as it prevented the lip from falling inwards, and yet it was neceſſary to give every chance for the new teeth to continue, as they hitherto looked extremely well; but a day or two afterwards, the ſurgeon found the lower jaw ſhake, and that an exfoliation muſt follow: he waited, however, nature's time, and in four months from her firſt ſeizure, a ſhell of the lower jaw ſeparated, and diſcovered three teeth like thoſe which were in the upper jaw. The ſecond jaw-tooth, which he apprehended would fall in the exfoliation, remained firm, and appeared juſt like one grown yellow by age. On the day following, one of the new teeth came away, and appeared a mere ſhell, reſembling that of a fœtus. In a week afterward, both of the new teeth dropped from the upper jaw, and the gum cloſed; the mouth healed in a fortnight, at which time the new teeth in the lower jaw continued faſt in their ſocket. At the end of ſix weeks from this time, a new tooth was obſerved juſt ſhooting through the gum in the upper jaw, in the place of one of the teeth that had dropped out; this grew very faſt, and was ſoon followed by another, both which became firm and ſerviceable.

CASE LIII.

Of the Uſe of the Bark in a Mortification.

A Gentleman of the very advanced age of 76, who had enjoyed uncommon good health all his life, having been ſcarce ever ſick, or out of order, till he was ſeized with a partial palſy two or three times, of which he recovered ſo well, that he walked abroad with the help of a ſtick. On the 10th of April, he complained of a pain in the toe next to the little one of the right-foot, but neglected it two or three days, till the pain increaſing with an oozing of thin humour from a ſmall black ſpot, and his ancle ſwelling, ſome tincture of myrrh and aloes were applied to it.

On the 14th, the ſwelling had gone a good way up his leg, and the ſpot was very black and dry. Antiſceptick fomentations, as well as the tincture, were now uſed; notwithſtanding which, and a mixture of the juice of hemlock, and ſpirit of ſal ammoniac with the tincture, all the ſymptoms increaſed next day. The phyſician now preſcribed a draught of the bitter decoction, in which half a dram of the Peruvian bark was boiled, to be taken every morning.

The day following, being the 17th, the bone of the toe appeared bare, the fleſh round it mortified, and black ſpots were ſeen upon the ancles and calf of the leg.

The 18th, the toe was cut off at the ſecond joint, a digeſtive was applied, and the leg was embrocated with ſpirit of wine, ſal ammoniac, and camphire; and all the medicines being continued, there was no great change for three days.

On the 21ſt, the black ſpots looked paler, but the toes were all livid.

On the 22d, his pulſe intermitted, and he was very uneaſy.

On the 23d, the toes were very black.

On the 24th, the ſores were fœtid, but the black ſpots in the leg began to diſappear.

On the 25th, the ſpots were of a pale red colour, and the patient had great pain in the ſole of his foot.

No great change on the 26th and 27th.

On the 28th, the little toe was cut off, and there was an appearance of ſuppuration, with violent pain in the ſole of the foot.

On the 29th, the patient had no ſleep, was very feveriſh, raved, and looked wildly. An emollient poultice was now applied to the ſole.

On the 30th, the raving continued. The ſwelling of the leg was almoſt entirely gone, and it had no ſpots on it.

On the 1ſt of May, a quantity of thin bloody matter was let out by an inciſion in the ſole of the foot, where the tendons were bared, and very tender.

On the 2d and 3d, as before.

On the 4th, the two remaining leſſer toes, having mortified, were alſo taken off. The great toe appeared a little livid.

On the 5th, the upper part and ſole of his foot appeared ill-coloured; the patient's appetite now, for the firſt time, failed him.

On the 6th and 7th, little change.

On the 8th, fifteen grains more of the bark were added to each draught.

On the 9th, the ſwelling in the leg was much diminiſhed.

On the 10th, the ulcers in the foot enlarged.

On the 11th, as on the 10th.

On the 12th, towards night, he had frequent faintings, an intermitting pulſe, great oppreſſion and ſickneſs, with ſtrugglings. Compound ſpirit of lavender, and aromatic ſaline ſpirit, were now adminiſtered.

On the 13th, the patient was much relieved, but ſtill remained confuſed in ſenſe and appearance.

On the 14th, he was calm and chearful, with a regular pulſe.

On the 15th, the ſwelling of the leg being now gone, the ſpirituous embrocation was laid aſide.

On the 16th, the ulcer was cleaner. Half a dram more bark was added to each draught.

From this time to the 26th of June, his cure ſeemed to go on ſucceſsfully, with his dreſſings and decoction; but on this day the foot began to ſwell, with great pain.

On the 27th, the ſwelling increaſed up the leg; and the great toe, which had been hitherto of a blueiſh colour, became nearly black. The decoction was continued, and the ſpirituous embrocation was again uſed.

The ſwelling, with black ſpots about the ancle, encreaſed up to his knee before the 7th of July, when the ulcer in his foot was black. Inſtead of the bitter decoction, he was now ordered to take half a dram of the bark in ſubſtance, morning and evening.

On the 8th, black ſpots appeared above as well as below the knee; one of them was two inches in diameter.

On the 9th, the ſwelling of his foot decreaſed.

On the 10th, his right teſticle alſo ſwelled.

Little change till the 15th, only the ſwelling of the teſticle abated.

On the 15th, the patient would ſit up. The leg ſwelled greatly.

On the 16th, many ſmall, livid, or pale red ſpots, appeared above the knee.

Till the 20th, the appearances were all mended; the ſwelling diminiſhing, the ſpots going off, and the ulcer digeſting.

On the 20th, he had got little ſleep; had great pain; his pulſe was oppreſſed; and he was faintiſh: he took ſome cordial drops without any relief. The doſe of his bark was increaſed to two ſcruples morning and evening.

The next day the leg looked worſe, but much better the two following days.

On the 24th, in the night preceding this day, he had a great ſweat in the thigh and leg, and the ſwelling was fallen two inches.

The cure went well on with the bark, without any new ſymptom, till the 10th of Auguſt, when a ſmall tumour was obſerved near the heel, the matter from which diſcharging at the ulcer in the ſole of the foot, it was afterwards cured by compreſſion. The ſwelling of the leg appearing now to be only puffy, was bandaged up to the knee. In the beginning of October, when the ſores ſeemed to be nearly cured, he omitted the bark; but a bliſter, as big as a hen's egg, riſing on the great toe of the left-foot, and two days after, ſuch another appearing on the great toe of the right-foot, he returned again to the uſe of the bark. The ſkin which theſe covered appeared freſh and clean. The other ulcers were nearly healed; and the bark was directed to be continued ſome time after the cure, to prevent more returns.

It is to be remarked, that during all the time of the cure, except when the patient was ſick and oppreſſed, he would not be confined to any regimen in diet, but indulged himſelf even in a plentiful uſe of ſalt meats and ſtrong malt liquors.

CASE LIV.

Of an Aneuriſm.

A Stout, healthy man, 25 years of age, was admitted a patient into the Mancheſter Infirmary on the 28th of February, for an aneuriſm of the femoral artery, occaſioned, a little more than three months before, by the following accident. Sitting with his wife, he unluckily took up a pair of ſharp-pointed ſciſſars, and attempting to cut a flaw, or what the good women call the ſtep-mother's bleſſing, from the root of the nail of one of his fingers, he dropped the ſciſſars; and ſuddenly clapping his knees together, to prevent the ſciſſars falling to the ground, forced the point into his thigh, and wounded the artery. A ſmall quantity of blood inſtantly ſpurted out from the punctured veſſel; the bleeding was ſoon ſtopped, and the external wound healed up in a day or two. After which, a ſmall tumour formed in the thigh; which growing gradually larger, and ſomewhat painful, a ſurgeon of eminence was ſent for, who having tried various remedies to no purpoſe, and finding the tumour ſtill growing conſiderably larger and more painful, directed him to take the advice and aſſiſtance of the ſurgeons at Mancheſter. From this account of his own caſe, and from examining the tumour, it was immediately concluded to be an aneuriſm; and on the 4th of March following, the operation was performed. After the crural artery was ſecured above by the tourniquet, an inciſion was made the whole length of the tumour, at leaſt ſeven inches; and having cleared away the grumous clots of blood, to the quantity of a pound or more, the tourniquet was ſlackened; on which the blood immediately guſhed out of the punctured veſſel with great impetuoſity, and plainly diſcovered from whence it came. The tourniquet was then inſtantly directed to be made tight, and the remaining part of the blood was ſoaked up from the naked artery, with a ſpunge dipped in warm water, which laid in view the puncture, about as large in diameter as would admit of a crow's quill. A needle, threaded, was then paſſed about half an inch above, and again below the orifice of the wounded artery; and both parts of the veſſel ſecured by ligature, without dividing the artery. The wound was filled with lint, and covered with large pledgets, ſpread with yellow baſilicon, and a gentle eaſy bandage over all. On the 6th of March, a ſlight hæmorrhage enſued, which made it neceſſary to take off the dreſſings, when it was perceived that the upper ligature was too ſlack; the threaded needle was therefore paſſed as before, a little higher than the firſt, and included a ſmall bit of plaſter rolled up as a compreſs, within the ligature, for fear of cutting the artery; and by way of farther ſecurity, the ſame was done below, and the whole was dreſſed as before: not the leaſt hæmorrhage appeared afterwards; the wound digeſted very well; the injured part of the artery ſloughed off, with the ligature, in a ſhort time; the external wound was healed up in ſix weeks; and the patient diſcharged, perfectly cured, on the 17th of April following.

C A S E LV.

Of periodical Diſcharges by an Ulcer.

A Healthy, vigorous, labouring country-girl, of ordinary ſtature, ſtrained her right-foot at 15 years of age, and again at 19, when a foul ulcer broke out in it. This being healed up in three weeks, ſhe ſoon after complained of a diſorder through all her body. At 20 years of age, her periodical diſcharges appeared for the firſt time, but in a very ſmall quantity.

The former diſorders ſtill continuing, ſhe was blooded in the right-foot, ſoon after which, an ulcer was formed in that ancle, which had continued about five years; a conſiderable ſhare of the heel-bone having come out. This ulcer emitted in two or three days of each month, as large a quantity of blood, as women generally paſs in their evacuations, and this in regular periods, without any bleeding at the intermediate time. Some days before this periodical hæmorrhage, ſhe always complained of great pain in her foot, which became tolerably eaſy as ſoon as the evacuation was paſt. She continued in this way for five years, when the bones being caſt out, and the ulcer beginning to heal up, while her body grew more plump and ſtrong, the diſcharges came the natural way, in much the ſame quantity, and continuing the ſame time they uſed to do at her foot, which did not then bleed at all. She had a ſecond natural return of the diſcharges in June; but in July ſhe paſſed the natural period, and her foot became more painful; but the evacuations returning as in other women, the pain ceaſed, and after that time ſhe remained in good health, with her diſcharges regular in the natural way, without any other evacuation than of a ſmall quantity of matter at the ulcer, which ſtill continued a little open.

C A S E LVI.

Of a Palſy occaſioned by a Fall, and Compreſſion of the ſpinal Marrow.

MR. H——, aged 14, enjoyed a good ſtate of health previous to his laſt illneſs; he was ſenſible, of a ſprightly diſpoſition, and well-proportioned for his age. A phyſician was called to viſit him on the 8th of March, and found him paralytic, from below the breaſt without any ſenſe of feeling, or motion in his legs, and a total incapacity of retaining urine and ſtools.

He gave the following account of his caſe, which was confirmed by his father and his apothecary. He ſaid, that two days before the laſt Chriſtmas, in playing with one of his companions, he was pulled backwards, and fell upon the edge of a chair, which hurt him a little between the ſhoulders; when he came home in the evening, he complained, that upon raiſing his head, he had a pain ſtriking through and acroſs his cheſt, and his father obſerved that he held his chin down towards his breaſt; but as he concealed his having had a fall, and as his complaints were not very troubleſome, he went to ſchool in the country, where he remained till the 29th of January, but growing worſe with paralytic ſymptoms in his legs, he was brought to town. The day he came home, he had very little uſe of his legs; however, in the evening, after having them well rubbed, he made ſhift to ſcramble up ſtairs, but fell down on the floor of the bed-chamber, and afterwards loſt the uſe of his legs entirely. On the 7th of February, he loſt the power of retaining his ſtools; and two days after that, his urine came away involuntarily.

From the time of the fall to the day of his death, was about three months, but three days before he died, he complained of ſhooting pains in his arms, which laſted about half a minute at a time, leaving him quite eaſy, but frequently returning.

The day before his death, he loſt the uſe of his arms, and the motion of his head; complained of violent ſhooting pains through his head; was perfectly ſenſible to the laſt moment, and died totally paralytic on the 31ſt of March, without a groan or convulſive motion.

CASE LVII.

An uncommon Sore Throat.

A Man, 34 years of age, ſubject all his life to plethoric indiſpoſitions, eſpecially in the ſpring, and to catarrhs when the leaſt expoſed to cold; who had not uſed any fermented drink or heating food for ſeveral years, and had retrenched ſome of his ordinary diet for near two months, to prevent his vernal plethora; having ſat ſeveral hours in a chamber, without a fire, and with an open window, while the weather was very cold, and the air foggy, about the middle of January, complained, as ſoon as he roſe from his ſeat, of being ſtiff with cold, and very weary, with pains in moving all his muſcles, and perpetual yawning. To free himſelf of the uneaſy coldneſs, he immediately went home, ſat near a fire, and drank tea; but could not remove the ſhiverings and wearineſs. Upon going into bed, he was ſeized with the appearance of an aguiſh paroxyſm, which had made a regular courſe before morning.

The next day he was a little feveriſh, and ſtill complained of pains through all his body; and therefore took his uſual cure in ſlight maladies of that kind, viz. a laxative phtiſan, in which tamarinds and ſenna had been boiled, which operated gently, and gave him conſiderable relief. The day following, he was almoſt free of all his former complaints, but his right tonſil was ſwelled and painful, for which the phtiſan was repeated.

In the morning of the 4th day the tonſil was leſs and eaſier, and except a little bitterneſs in the mouth, he had ſcarce any other uneaſineſs; but in the afternoon the left tonſil became painful, on the leaſt attempt to ſwallow, his pulſe turned quick, but not very ſtrong. He was let blood from a large orifice, in one of the greater jugular veins, to the quantity of 16 ounces; after which his pulſe became very quick, ſtrong, and full. On this appearance of plethora, eight ounces more were taken away, and the patient was then inclined to faint; but in a quarter of an hour after, his pulſe was very near as ſtrong and quick as ever. The pain of the left tonſil was ſo far from being diminiſhed, that it continued increaſing; and all the teeth in the ſame ſide of the lower jaw, which were otherwiſe very ſound, were alſo violently and conſtantly affected: but the pains were moſt exquiſite when he ſwallowed. In the mean time he could open his mouth as wide as ever, and nothing preternatural could be obſerved in the entrance of the gullet, except a ſmall ſwelling of the right tonſil, and an eryſipelatous redneſs of the uvula and left tonſil without any tumour. After he went to bed, the pains were ſo racking, eſpecially when he ſwallowed his ſpittle, (which he could not poſſibly prevent doing frequently, whatever care he took to the contrary) that though he was tolerably patient under pain, he made the whole bed ſhake with his tremblings, and large drops of ſweat appeared on his ſkin, at each attempt. About midnight he could lie no longer, but putting on his cloaths, he received the fumes of warm water into his mouth, and the pain remitting ſomewhat, while he endeavoured to hinder the occaſions of it's violent increaſe, by leaning his head forward, opening his mouth, and permitting the ſpittle to run out; he paſſed the reſt of the night in a drowſy nodding way.

The next morning his ſwallowing was performed with great difficulty and pain, and he was ſo hoarſe he ſcarce could be underſtood when he ſpoke; but he had no difficulty of reſpiration, and the fulneſs and ſtrength of his pulſe were leſs, but it's quickneſs remained. His throat had the ſame appearance as the night before. The purgative phtiſan was repeated. The fumes of warm water were often made uſe of; and an emollient cataplaſm was applied externally on the painful parts.

In the evening the pain was eaſier, and the pulſe rather better; but the hoarſeneſs continued. A bliſtering plaiſter was applied on his neck and back, and an emulſion was prepared for his drink. The plaiſter did it's office well, and the patient, notwithſtanding his pain in ſwallowing, drank two bottles of emulſion in the night, which prevented any ſtrangury till near noon of the following day, when the chamber being over heated, and the patient put into a ſweat, the ſtrangury came on violently, of which he was relieved, after ſome hours, by carrying away the fire, and injecting an emollient clyſter with turpentine. The emollient poultice was in the mean time renewed, the fumes of water were frequently applied, and a mild reſolvent gargariſm aſſiſted the evacuation of the matter, which began now to be produced in an unuſual quantity, in the entrance of the throat. In the evening the patient ſeemed, by his pulſe, to be pretty free of fever, and all his troubleſome ſymptoms were conſiderably removed.

The bliſtered parts, diſcharging plentifully the two ſucceeding days, he ſeemed to mend apace, but ſtill continued the poultice, fumes, and cataplaſm.

On the third, which was the ninth of his diſeaſe, finding in the morning the pain increaſed, he took the laxative phtiſan, and plied the external medicines; but through the day the ſymptoms gradually increaſed, till in the evening his pain in the left tonſil and teeth was rather more violent than ever, the hoarſeneſs was worſe than formerly, his pulſe was low and quick, he was drowſy, and paſſed little urine, no ſwelling could be ſeen on the left, painful ſide, and he breathed freely. He drank largely of warm poſſet, made with Rheniſh wine, and chewed long pepper with the teeth of the affected ſide. His urine ſoon came in great plenty, he diſcharged large quantities of matter at the mouth, and in two or three hours was much more free of pain, his pulſe became ſlower, and the drowſineſs went off. The gargariſm was renewed, with the addition of ſome ſweet ſpirit of nitre, and Venice treacle was added to the cataplaſm.

By the uſe of theſe medicines he was greatly recovered in the two following days, and nothing remaining the third, except a little bitter taſte, a trifling ſwelling in the right tonſil, and a weakneſs in the left-ſide of the throat, he went abroad to his uſual employment, uſing a ſpare diet for a week, and applying the external remedies; in which time he got quite free of all uneaſineſs, except a dull pain of the left ſide of the throat, eſpecially in yawning; and he imagined all the food he ſwallowed paſſed only by that ſide, where ſometimes a little of it ſtopt, and was with ſome trouble paſſed back again into the mouth. To remove this weakneſs, the patient, one evening,

ing, gargled his throat with claret wine; that night he was ſenſible of a ſtraitneſs in his breath; and in the morning, when he awaked, he was quite hoarſe, breathed with more difficulty, and on coughing, his head and eye-balls felt as if ſtrongly girded. His head became very red, and he began to hiſs in breathing. All theſe bad appearances went greatly off after breathing in the fumes of warm water, and drinking warm tea. In a few hours after, he ſwallowed pills compoſed of ſweet mercury and reſin of jalap, which operated mildly, and leſſened all the cauſes of complaint conſiderably, and a ſecond ſuch doſe taken two days after, removed all of them entirely, except a little weakneſs of the left-ſide of the throat, and a dull pain there in yawning, which remained ſeveral weeks after.

CASE LVIII.

Of a Hernia Humeralis, or Rupture in the Teſticles.

ON Thurſday, the 27th of February, a phyſician was called to a gentleman between thirty and forty, labouring under a pain and ſwelling of his teſticles; and upon his enquiring into the cauſe of theſe complaints, he gave the following account: that about a month before he had contracted a gonorrhœa, attended with a copious diſcharge from the urethra, with heat of urine and other ordinary ſymptoms; that he immediately applied to a ſurgeon, who directed him to make uſe of an injection, which very ſoon ſtopped the diſcharge. He then obſerved this ſwelling in his teſticles, which continued for ſome time ſmall, and rather ſore than painful. It was alſo accompanied with a difficulty in making water, which he ſaid came from him in a little ſtream, and in a very ſmall quantity at a time. For this complaint he had a bougie introduced, which brought on a plentiful evacuation, and gave him relief. This diſorder, however, of the urethra and bladder he paid but little regard to, as it did not confine him to the houſe, nor prevent him from going as uſual into company; an indulgence which, probably, did not a little contribute to the fatal termination of the diſeaſe. Within five or ſix days before the phyſician ſaw him, the ſwelling of the teſticles was much increaſed, and became very painful. Upon examination, the teſticles appeared to be much enlarged and inflamed, as alſo the ſubſtance of the ſcrotum, which had acquired an uniform globular appearance, and was equal in ſize to a large ſheep's bladder blown. The pain was not ſolely confined to the ſcrotum, but ſeemed to follow the direction of the ſpermatic chord, and gave him a good deal of uneaſineſs in his loins. His pulſe was quick, but neither full nor hard; his thirſt was conſiderable, and attended with univerſal heat.

He was immediately directed to loſe twelve ounces of blood, to take a cooling purge, to lie in bed, and to make uſe of the common fomentation morning and evening, covering the ſcrotum afterwards, with a cataplaſm of bread, milk and oil; to keep the part ſuſpended with a bag-truſs, and to drink plentifully of barley-water, and ſuch ſmall diluting liquors; as alſo to be very ſparing in his diet, and to confine himſelf to water-gruel, panada, or ſome ſuch food. On Friday morning his feveriſh ſymptoms were much abated, though he had paſſed the night but indifferently, the pain being conſtant and very great. The tenſion and ſwelling were not leſſened, but on the contrary increaſed, and the ſpermatic chord appeared to be more enlarged, and much harder. He was now ordered to be bled again immediately, to continue diluting plentifully, and to take a ſcruple of nitre every four hours, in a draught of barley-water, or ſome other ſmall liquor; alſo the fomentation and cataplaſm to be repeated. He complained this day likewiſe of a tickling cough, which he ſaid increaſed the pain in his ſcrotum very much; for this he was directed to take half a ſcruple of the ſoap-pill at night.

On Saturday he had paſſed the night much better, but ſtill his pain was very conſiderable, with the ſwelling and tenſion not at all abated. In one part there was an evident fluctuation of matter, which pointed outwards; all thoughts therefore of reſolving the tumour were laid aſide at preſent, and endeavours were uſed to encourage the maturation, by ſubſtituting a ripening poultice in the place of the former. The patient was alſo directed to take his ſoap-pills at night.

On Saturday morning, the fluctuation of matter was very manifeſt, though the quantity ſeemed to be but ſmall: in order therefore to evacuate this matter, and to ſet the parts ſomewhat at liberty, an opening was made by an expert ſurgeon, and a ſmall quantity of very fœtid matter was diſcharged. The pain was not in the leaſt relieved by this, the ſwelling was not diminiſhed, nor was it any ſofter to the touch; but in a few hours all the ſymptoms became worſe, and the tenſion was extended to the muſcles of the belly.

On Monday morning the wound was covered with a ſlough at the bottom; the edges looked crude, and the ſmell was extremely offenſive; the colour of the part was changed from a florid hue to a deep red; the pulſe intermitted very frequently, and here and there upon the belly were ſmall bladders. The patient wandered a good deal, and in a very few hours his ſenſes were entirely gone. Deep ſcarifications were made, the whole length of the ſcrotum; the part was dreſſed with a warm digeſtive; an antiputreſcent fomentation, with a large quantity of camphorated ſpirit of wine, was made uſe of, and the cummin-plaiſter applied over the whole. Some ſpoonfuls of a warm cordial mixture were ordered to be taken very frequently, and the whole treatment was of the cordial and antiſeptic kind; but neither the above mixture, nor any thing elſe, could be got down, or the patient would have been put upon the uſe of the bark. He died this evening.

On opening the ſcrotum, a ſmall quantity of very fœtid matter was found in the cellular membrane; the coat which immediately covers the teſticles was thickened to a very conſiderable degree, though the teſticles themſelves were in a perfect ſound ſtate: hence it ſhould appear that the diſeaſe in this caſe was not, as generally ſuppoſed, a diſorder of the teſticles, but that it was ſeated in the coat by which they are immediately covered.

CASE LIX.

Of a Mortification ſtopped by the Bark.

A Surgeon, of a very bad ſcorbutic habit of body, about 40 years of age, had a little pimple in the middle of the under lip, which his barber cut the top from in ſhaving him on Saturday the 9th of February. The following evening, upon going out to the cold air, the pimple ſwelled, and turned hard, with an inflammation all round it; which increaſing the Monday following, he applied an anti-inflammatory fomentation, with ſpirit of wine camphorated. Notwithſtanding the frequent uſe of this for four or five days following, and his being twice blooded, the inflammation, hardneſs, and ſwelling, increaſed conſiderably, extending itſelf to the angles of his mouth, ſome way along the cheeks, and all round the chin, with great pain, and with vaſt diſorder through his whole body.

On Friday the 15th, at eleven at night, a ſmall black ſpot, about the bigneſs of a herring-ſcale, appeared; not where the wound was, but on the middle of the red part of the lip, which ſpread ſo faſt, that by eleven the next forenoon, it covered near one half of his lip, which then began to ſtand out very much; when a conſultation of almoſt all the phyſicians and ſurgeons in the town where he lived was held, who adviſed the continuation of the fomentation and ſpirits as before, and a decoction of the woods. For two or three hours, the mortification continued to ſpread till it had covered almoſt his whole lip, reaching inwards and downwards to the gums, the hardneſs and ſwelling of the neighbouring parts increaſing. Upon this, he was adviſed to try the powder of the Peruvian bark, half a dram for a doſe. He took the firſt doſe betwixt three and four o'clock in the afternoon, and his lip was dreſſed at ten at night, when the mortification did not appear to be increaſing, at leaſt the increaſe was very inconſiderable. He then took another doſe of the bark. Towards the morning of the 17th, his lip was again fomented, and he took a third doſe of the ſame medicine. At ten in the forenoon of the next day, the mortification had made no farther progreſs ſince the preceding night. At night the lip was dreſſed again; and then, for the firſt time, ſomething like an appearance of ſuppuration was obſervable at the place where the wound, or rather pimple, was; but none at all on the mortified part. That night he took another doſe of the bark, and continued to take two doſes, one in the morning, and another in the evening, for a fortnight.

The fomentation and ſpirits being applied twice a day, and a little emulſion given him for drink, without any other medicine than the bark, the ſuppuration ſucceeded well in the mortified parts on the third day after he began to take that medicine; upon which, proper digeſtives and other dreſſings were applied. The ſloughs caſt off very well; the hardneſs and ſwelling went away; and in twelve or fifteen days the lip healed up, though with a conſiderable contraction by the great loſs of ſubſtance.

CASE LX.

Of an Emphyſema.

JOHN RIGBY, an invalid of Plymouth garriſon, aged about 60 years, of a healthy conſtitution, and rather of a lax than rigid habit, on the 18th of May was coming down from the banquette, when his foot gave way, and he fell with the whole weight of his body upon the ſpiked points of the paliſades. Not being able to raiſe himſelf from thence, with the aſſiſtance of a ſoldier cloſe by, he was immediately taken off, and with very little help walked to his barrack. The ſurgeon being ſent for preſently after the accident, found no wound but a ſlight ſcratch, made by the point of the paliſade, with little or no ſtraitneſs or inflammation. On examining the part, one of the ribs of the left-ſide was found fractured; and, on preſſing gently, a ſmall emphyſematous tumour was perceived upon the part, about the ſize of a crown-piece.

On the leaſt motion, he breathed with pain and difficulty. He was immediately bled pretty freely. The part was embrocated with ſpirits and vinegar; and a plaiſter, compreſs, and bandage, applied. He had an opening mixture, which in the evening procured him two or three motions.

About ſix o'clock the ſame evening, the patient was in much pain; his body, and one ſide of his face, much ſwelled; and the plaiſter and bandage being removed, the progreſs of the emphyſema was aſtoniſhing. It had ſpread itſelf over both breaſts, all along the left-ſide, backward to the ſpine down to the very extremity of it, all along the neck and face, particularly on the ſide on which he had laid, ſo that the right eye-lids were much inflated, and the eye entirely cloſed up.

A longitudinal inciſion was now made of

about an inch and a half above the fracture, where the ſwelling appeared moſt prominent. The air immediately ruſhed out with noiſe and violence; and even a conſiderable time afterwards, by ſtroking and preſſing the parts all around towards the opening, it continued to paſs off with a piping, crackling noiſe. He was very ſoon moſt ſenſibly relieved by the operation, and could breathe and ſwallow pretty freely, which he could not do before without pain and difficulty.

The ſame gentle efforts were perſevered in for near an hour and a half, by which the ſwelling in every part was greatly reduced, and the right-eye perfectly freed and opened. After dreſſing the part ſuperficially, a large compreſs, dipped in ſpirits and vinegar, with a long flannel bandage, was applied pretty tight round the whole trunk. He had an intenſe thirſt, and was teazed with a cough, which on the leaſt motion raiſed the pain in his ſide. For the firſt, he drank plentifully of barley-water with lemon-juice; and for the latter, he took an oily emulſion, with the paregoric elixir and ſyrup of poppies.

About nine, he breathed more freely, but the difficulty in ſwallowing was much increaſed. He was now reſtleſs and feveriſh; part of the bed-cloaths was removed, and he was bled a ſecond time, which ſenſibly relieved the difficulty in ſwallowing. As the ſwelling had not advanced, there was at this time no neceſſity either for removing the bandage, or for more inciſions; but orders were left to take off the bandage, and to ſtroke the parts if the ſwelling, pain, or difficulty of breathing, ſhould increaſe any time in the night. At three or four o'clock in the morning, he became very uneaſy; the ſwelling increaſed, and conſequently the breaſt became too much confined by the ſtricture of the bandage; which being removed, and the parts again ſtroked towards the orifice, a large quantity of air was evacuated. After this, he was again ſenſibly relieved, and ſlept ſome hours in a poſture between ſitting and lying.

About ten the next morning, he was much cooler, his pulſe more moderate and regular, his thirſt greatly abated, and his reſpiration free. On removing the bandage, though the ſwelling was not much increaſed on the injured part, yet it had extended itſelf all along the right-ſide, and down below the elbow of the right-arm particularly; which, on preſſing, made a conſiderable crackling noiſe, ſo that it might be heard all over the room.

The next day, the emphyſema had affected the groins and the upper part of the ſcrotum, but in every other place ſeemed at a ſtand: from this time the emphyſema gradually ſubſided in all parts of the body, ſo that no more inciſions were thought neceſſary. Whenever he coughed, he could hear the air fly off with a bubbling noiſe from the orifice. During the whole progreſs of the emphyſema, though the cough had been frequently troubleſome, he expectorated very little, and what came up was not in the leaſt tinged with blood.

In all the parts which the emphyſema had poſſeſſed, as the ſwelling ſubſided, he complained much of ſoreneſs, though he could ſuffer the parts where the ſwelling ſtill remained for ſeveral days afterwards, to be ſtroked and preſſed without pain. Five or ſix days from the time of the accident, he was able to riſe and walk in his room; and with ſome nitrous medicines, and his oily emulſion once or twice repeated, in ten or twelve days he was pretty well recovered; a little pain on the part excepted, which he felt a conſiderable time afterwards on coughing, or any quick motion. In leſs than a month he was able to do duty.

CASE LXI.

Of a Tumour, or Wen on the Cheek.

A Man, who was now about 54 years of age, had obſerved, when he was about 27, a little hard ſwelling in the muſcle of the lower jaw, on the left-ſide, without any hurt or viſible cauſe: at firſt, it went on ſlowly, but afterwards more rapidly; and the older it grew, it ſtill came on the faſter, till it became of a prodigious bulk and weight. From the firſt appearance of this tumour to it's total extraction, about twenty-ſeven years intervened. The patient had exceſſive pains and uneaſineſs in it, and at laſt it mightily weakened him, though otherwiſe a ſtrong, robuſt man.

This excreſcence was of the natural colour of the ſkin, of a glandulous ſubſtance, with ſeveral large blood-veſſels in it, and had hair growing on it as on the other parts of the body. It was almoſt round, and very hard, and as ſenſible as the fleſh of any other part; for as he was working in the fields, he accidentally made a large gaſh or wound in it with a ſharp iron, which proved very painful, but being cured by a ſurgeon after the manner of an ordinary wound, it ſtill retained the ſcar.

This excreſcence having grown ſo big, was attached to the muſcles under the left-eye, to the ear and it's muſcles, and to the muſcles of the lower jaw: on account of it's bulk and weight, it could not hang down freely without ſome ſupport; it therefore reſted upon the top of the ſhoulder, in which it made a conſiderable impreſſion. It was alſo ſupported by the man's hand in the day-time, and laid on a pillow in the night.

Three or four days before this tumour was taken out, the patient obſerved it begin to mortify at the lower end, which made him ſo uneaſy, that he took a knife and cut off a good part of it. This occaſioned a great hæmorrhage, ſo that he reckoned he loſt four pounds of blood before it could be ſtopped. The patient, after ſo much pain, at laſt applied himſelf to a ſurgeon of the neighbourhood, who made a total extirpation, in the following manner. He made a cloſe ligature, taking in the baſis of the excreſcence, and all the looſe ſkin; and contracting it as much as poſſible, he cut it entirely off with a ſharp razor. There guſhed out of the excreſcence, after it was cut off and lay on the ground, as near as could be conjectured, two pounds of blood, for it was nouriſhed by ſeveral large blood-veſſels, perhaps by ſome branches of the carotid artery much enlarged, and other blood-veſſels from the ear, the muſcles of the eye, and lower jaw above mentioned. Three months after the taking away of the tumour, the ſurgeon having cut off about a quarter of an inch broad of it's baſis, found therein four large blood-veſſels; the baſis, as it appeared at that time, was five inches in diameter, which ſeemed too large for the whole ſide of the face; ſo that, after the operation, the ſurgeon ſuppoſed the looſe ſkin was turned backwards, which might make the baſis appear ſo broad.

After all this loſs of blood, the excreſcence weighed full nineteen pounds; ſo that, before the patient's own inciſion and this operation, it muſt have been ſeveral pounds heavier, which is a moſt prodigious weight to hang on ſuch a place. This tumour was of a ſpheroidical figure, and meaſured thirty-four inches about, by the longeſt way, and twenty-eight by the broadeſt.

The hæmorrhage, which was conſiderable, was ſtopped by the vitriolic powders and other aſtringents, and the ordinary dreſſing was uſed; ſo that this great cure was compleated in ſix weeks time, and the patient entirely recovered. The lower lid of the patient's left-eye continued depreſſed a little, as did the ſame ſide of the mouth, which was occaſioned by the great weight hanging on that ſide of the face. The

head

ſhad at firſt, after cutting the tumour, inclined much to the right-ſide, owing to the removal of the great weight on the left-cheek; but after the patient perfectly recovered, it began to ſtand upright. Though the ſkin, and even a great deal of the muſcular part of the cheek and lower jaw, were cut away, yet they grew up again, and were of the ordinary colour of the ſkin, and like the other ſide of the face; ſo that the hair grew on that ſide of the face as well as on the other, which he commonly ſhaved: and this was as ſurprizing as any thing in this whole caſe.

CASE LXII.

Of Convulſions cured by Muſk.

A Young lady, of a ſprightly diſpoſition, in the 17th year of her age, happening, the beginning of January, to be at the Salop Infirmary, was induced, out of curioſity, together with three other young ladies of her acquaintance, to receive the electrical ſhock. They joined hands, and received a ſlight ſtroke from a charged phial of eight ounces. No other than the uſual effects were obſerved at that time; but three hours after, Miſs —— felt two or three ſhocks, accompanied with the ſame ſenſation, and in all reſpects ſimilar to thoſe ſhe had received from the phial, except that they were by no means ſo ſtrong.

Theſe very ſlight convulſions recurred once or twice a day; no particular periods were obſerved, and ſometimes a whole day intervened between each fit. They were not particularly taken notice of until the beginning of March, when they were obſerved by her father, who imputed them to an ill habit which ſhe had by ſome means or other acquired.

From this time her convulſions gradually became ſtronger; and in the beginning of April, her father being informed of the ſuppoſed cauſe of them, deſired a phyſician to attend her.

The firſt paſſage being previouſly cleanſed, ſhe was put on a courſe of medicine, conſiſting of fœtid gums, with caſtor and oil of amber, in the form of pills, which were waſhed down with draughts containing ten grains of muſk and ſixty drops of the volatile tincture of valerian. The diſeaſe increaſed faſt; opium, and likewiſe Frobenius's æther, both internally and externally, as many antiſpaſmodics as could be thought of, with bliſters, &c. were tried, but in vain. The bark, ſteel, and valerian, together with the cold bath, were of no ſervice. In the beginning of May, her convulſions had increaſed to ſuch a degree, that her phyſician grew apprehenſive of her being taken off in one of them. Her fits always began with a diſagreeable, rather than painful ſenſation at her ſtomach; almoſt at the ſame inſtant her mouth and all her features became diſtorted. Her head was ſuddenly and violently drawn down to her breaſt, as in the *emproſthotonos*; and the next moment backward, as in the *opiſthotonos*. Her legs, arms, and, in ſhort, every muſcle of her body, at one time or other of the fit, ſeemed to be violently agitated, and became ſpaſmodically contracted.

Her paroxyſm uſed to continue ten or fifteen minutes; at the decline of which, as if nature was quite exhauſted or overpowered, her muſcles became at once relaxed, and ſhe fell into an hyſteric fit of crying, which was ſucceeded by a comfortable ſleep.

She generally awoke faintiſh and low-ſpirited, complaining much of great ſoreneſs, eſpecially of her breaſt and ſtomach, the effects of the violent ſpaſms. Her pulſe was at all times ſmall; the periodical evacuations went on regularly, both as to time and to quantity, and the urine was generally pale. Theſe fits returned, for the moſt part, three or four times a day, though ſhe ſometimes eſcaped them two or three days together. They were more frequent and more ſevere when the weather was damp and the barometer low.

Having unſucceſsfully tried ſuch things as were thought moſt likely to relieve; having obſerved the diſeaſe gradually to increaſe, and finding it at length at ſuch a height as threatened the life of the unhappy patient, her phyſician determined to try very large quantities of muſk; and experience having taught, that this drug might be given to great advantage in much larger doſes than it is generally preſcribed, he ordered half a dram to be taken every four hours in the form of a bolus, and to be waſhed down with a volatile julep. It was highly pleaſing, as well as ſurprizing, to obſerve the good effects of this medicine: it was no ſooner in her ſtomach, than the fit (at the beginning of which the firſt doſe was taken) began to abate, and in a minute or two entirely went off. The three or four ſucceeding ones were very ſlight, and in four days ſhe was entirely free from them. She now began to be tired of her bolus, and it was taken but twice a day: in a week more, it was entirely omitted. She continued perfectly well for upwards of a month, during which time ſhe took a bitter tincture of the bark, and had recourſe to the cold bath. Her diſeaſe then returned, but with much leſs violence than before, and it was again removed by the muſk. She relapſed three or four different times, and was as often recovered by the ſame medicine. After this, ſhe enjoyed an uninterrupted ſtate of health for near three years, when the concern occaſioned by the death of a tender and affectionate mother brought on her old complaint; it was, however, removed as uſual, though not in leſs than a week's time; yet her ſpaſms abated from the beginning. She continued from this time to have very ſlight attacks once in a fortnight or three weeks, but they always gave way to the muſk, which ſhe took care ſhould be in readineſs.

Near the end of five years from the firſt ſeizure, ſhe went to Bath. During the firſt month of her drinking the waters, ſhe continued to have frequent, though very ſlight, attacks of her diſeaſe. In the beginning of December ſhe began to bathe. The day ſucceeding that on which ſhe firſt bathed, ſhe was ſeized with one of the moſt ſevere fits ſhe ever had; but, as uſual, it was ſoon removed by the muſk. From that time ſhe remained free from complaints. She continued to bathe and drink the waters, and ſhe returned home in perfect health.

CASE LXIII.

Of a Boy who lived ſome Time without Food.

FEBRUARY the 3d, a lad, about fifteen years of age, fell ſick, and complained of pains all over his body; and towards the latter end of the month he was ſeized with a violent fever, in which he continued for three weeks, and then recovered.

The beginning of April following he relapſed again, his fever continuing for three weeks; and during that fever he had a ſhaking in his body, as if he had been paralytic.

On the 10th of June following he relapſed a third time, when he became dumb, loſt his appetite entirely, and the uſe of his limbs, and continued without eating or drinking, though all means were uſed to make him do both: but he recovered of his fever on May 17, in the following year; yet he ſtill continued dumb, and without either eating or drinking, or having the uſe of his limbs, till the 10th of June, in this ſecond year, when he was again ſeized with an extraordinary fever; and the next day he recovered his ſpeech, but continued in the fever, without either eating or drinking, or having the uſe of any of his limbs, till the 11th of November following, when he recovered his health pretty well, and the ſtrength of one of his legs: and thus he continued, without either eating or drinking, only waſhing his mouth ſometimes with water; and when he ſaw the reſt of the family taking their meals, it always gave him great uneaſineſs, and he commonly retired.

On the 10th of June, in the third year, he had a fever again, which continued till the beginning of September after, when he recovered of the fever, though he never could be prevailed on to take any kind of meat or drink; and thus he continued in pretty good health, and freſh-coloured, till the 7th of June in the fourth year, when he was again taken with a ſevere fever; and on the 10th, at night, the patient's father preſſed him extremely to take a little milk boiled with oatmeal, which at length he agreed to, and he took a ſpoonful of it, which ſtuck ſo long in his throat, that his parents thought he had been choaked; and ever after he took a little food, but ſo very little, that a halfpenny loaf ſerved him eight days. All the time he faſted he never had any evacuation by ſtool or urine; and it was fourteen or fifteen days after he began to eat before he voided either. He continued in pretty good health, but wanted the uſe of his legs.

CASE LXIV.

Of uncommon Nervous Symptoms in a Girl of Thirteen.

MISS J—— M——, a girl juſt turned of thirteen years of age, of a ſtrong habit, lively diſpoſition, and all her life healthy, though of a pale complexion, was twice, at ſome diſtance of time, ſeized with a ſenſe of ſtrangulation about her throat, and faintneſs. Theſe ſymptoms were ſo ſlight as ſcarce to have deſerved notice, had they not been ſucceeded by the following diſorder:

On the 15th of July ſhe dined on cold beef, eat near a large cucumber, and drank after it a great glaſs of cold water, which was her ordinary drink. She was immediately after ſeized with a giddineſs, and that ſucceeded by a ſickneſs at her ſtomach, which laſted all night. The next morning, as her complaint continued, ſhe was vomited with *ipecacuanha*; which, however, did not relieve her.

On the 17th, her right-hand and arm began to ſhake involuntarily, and her ſickneſs went off; but ſhe had no appetite for animal food. The ſhaking increaſed ſurprizingly, her hand and elbow moving alternately almoſt ſix inches from her ſide, and extremely quick; and this when ſhe was aſleep, as well as awake. The motion was ſo ſtrong, that it was difficult for any perſon to hold her arm ſtill with one hand; and, as ſoon as it was confined, the other arm and hand were ſeized with the ſame motion, and continued to move till the arm firſt affected was let go, when it immediately returned to that again, and the other was ſtill. This experiment was carried yet farther: after confining the firſt, the motion, as has been ſaid, went into the other arm; that alſo was confined, and the motion went into her legs and thighs; they alſo were confined, and her whole body fell a moving. It is very remarkable that, upon confining the arm firſt affected, ſhe was ſeized with a qualm, which went off with a ſtart, and inſtantaneouſly the other arm began to move. This interval was very ſhort; for from the time that the motion of the firſt arm ſeized was entirely ſtopped till the other began to move, was not above three ſeconds of time, and ſometimes not half a ſecond. This experiment was repeated ſeveral times with the ſame ſucceſs.

In this way the patient continued above a fortnight, the motion being perpetual when aſleep, as well as when awake. She ſlept well, and her appetite, except for animal food, was not amiſs. In the mean time, remedies were not omitted, and ſhe was viſited at times by no leſs than four eminent phyſicians. Being naturally coſtive, ſhe was purged ſeveral times, with *tinctura ſacra*, one ounce and a half; and tincture of black hellebore, half a dram; and in the intervals took a bolus, with ten grains of camphire, twice a day. She thought the camphire in ſubſtance made her ſick; ſo it was diſſolved in a little ſpirit of wine and vinegar, and given in a draught with ſome ſimple-water. Her arm was rubbed with a fleſh-bruſh, embrocated with the volatile liniment, and at laſt bliſtered, but all to no purpoſe.

On the 29th of July, her diſeaſe put on another ſhape. About ten o'clock in the morning, as ſhe was getting up, ſhe was taken with a fainting-fit, which laſted above half an hour. At this time a fire broke out within two or three doors of the houſe where ſhe lived, and all the neighbourhood was in an uproar. When ſhe recovered a little out of the fit, but before ſhe came to her right ſenſes, ſhe was ſo much alarmed at ſeeing her aunt, with whom ſhe lived, in tears, that ſhe ran about the houſe in the utmoſt diſtraction. Her phyſician had been ſent for on her firſt ſeizure, and came immediately. By this time the fire was increaſed, the houſe was in a blaze, and that where the patient was, full of people aſſiſting, or ready to aſſiſt, in moving the goods. He found the poor girl in ſtrong convulſions, ſo that two people could ſcarcely hold her. The fire was ſoon extinguiſhed; but the poor patient continued in fits the whole night, being ſeldom an hour and a half free, and for the moſt part not a quarter of an hour.

The fits grew ſtronger and ſtronger for the firſt three or four days, and at laſt it was as much as three people could do to keep her in bed: ſhe was even miſchievous, and endeavoured to ſtrike and bite every body near her, though naturally of a ſweet and affectionate diſpoſition. In order to prevent her hurting herſelf or others, her friends were obliged to have a waiſtcoat for her, ſuch as is uſed for mad people; without which it would have been impoſſible to have managed her. For ſome days, the intervals were very ſhort, and ſhe was even then ſcarce thoroughly ſenſible. But afterwards, ſhe recovered her ſenſes in the intervals, and told when the fits were coming on; ſo that the people about her prepared accordingly, by ſecuring her hands by means of the long ſleeves of the waiſtcoat, and by tying her knees together with a napkin.

This ſtage of the diſeaſe laſted a fortnight, and the fits proceeded in this manner. She was firſt ſeized with a faintneſs, her eyes cloſed, and ſhe continued ſo through the whole paroxyſm. She ſighed, groaned, and made ſeveral odd noiſes: ſhe ſtruggled violently, throwing about her arms, legs, head, and body, with amazing ſtrength. She foamed at the mouth, and ſpit: then ſhe would lie ſtill, without motion or reſpiration, for above a minute. A looking-glaſs was ſeveral times put to her mouth whilſt ſhe was in this ſtate, and there was not the ſlighteſt ſpeck to be ſeen on it. Her pulſe too, at this time, was not perceptible: after this, ſhe fetched a deep ſigh, and began to ſtruggle afreſh. The ſtruggling grew weaker by degrees, till ſhe came quite out of the fit. When ſhe had been in this way for about eight days, the intervals became longer; and the moment the fit was over, ſhe got up and ſat in a chair till another came, when ſhe was lifted into bed again.

Towards the laſt, every fit ſeemed to be divided into three acts, if they may be ſo deſcribed; for ſhe lay ſtill twice in the way already mentioned, and conſtantly came out of them in the following manner. She firſt drew up her eye-brows, as if wanting to open her eyes; then ſlowly and deliberately bringing up her left-hand towards her right-eye, till her finger and thumb touched the eye-lid, ſhe pinched up the ſkin a little, and drew back her hand with a jerk, as if ſhe wanted to pull out a hair. She repeated the ſame action to the other eye-lid; and then opening her eyes, ſhe turned her head every way with great quickneſs, and darted her eyes from one ſide to another, to every corner of the room, and under the table, like one in the utmoſt fright and aſtoniſhment. But ſhe was never ſenſible that ſhe did this, nor that ſhe brought her finger and thumb to pinch her eye-lids. This uniform appearance continued for the laſt five or ſix days, when the fits were ſo weak, that ſhe was managed, as ſhe ſat in her chair, by one perſon or two. In all this time ſhe took very little nouriſhment, till towards the laſt; ſo that ſhe was thin, pale, and weak. What ſleep ſhe had was the effect of opiates, thirty drops of liquid laudanum being her uſual doſe. At all times when the fits were off, her hand and arm moved as before.

The fits were at firſt ſo violent, that ſhe could not be blooded on account of her ſtruggling; and as they weakened, this operation was not judged neceſſary. Her head was ſhaved and bliſtered; and on the 3d of Auguſt, when we could get her to ſwallow medicines, the following were ordered.

Take the beſt Ruſſian caſtor powdered, and cinnabar of antimony, of each twelve grains—of ſyrup of ſaffron, enough to make a bolus. To be taken every ſix hours, drinking after it four ſpoonfuls of the following mixture.

Take of camphire, half a dram—of honey, a ſufficient quantity to diſſolve the camphire—of ſimple penny-royal water, ſix ounces. Strain the mixture, and add ſyrup of ſaffron, and tincture of ſaffron, of each three drams.

She continued the uſe of theſe medicines, as directed, for two days, and afterwards twice a day for above a week.

On the 12th of Auguſt, the fits, which had been gradually weakening, left her entirely. The ſhaking of the arm, though not near ſo violent, continued; but another grievous ſymptom ſupervened, ſhe totally loſt the uſe of her legs. Her feet were abſolutely without all feeling, ſo as not to be ſenſible when touched, pinched, or bruiſed. This want of ſenſation extended half way up her legs. Her appetite returned; ſhe recovered her fleſh, and ran about on her knees with ſurprizing agility, for ſhe was of a lively, ſtirring diſpoſition. In order to remove this complaint, every application was made, and every experiment that could be thought of was tried. Her legs and feet were ſtrongly rubbed with a fleſh-bruſh for ſome time. The tepid bath, and acrid applications, ſo as at laſt even to raiſe bliſters, were not omitted. For ſome days the cold bath was uſed; but ſhe was always chilly and ſick after it, ſo that it was not perſevered in. But the friction and volatile ſtimulating applications were continued, viz. the fleſh-bruſh, the volatile liniment, and bruiſed muſtard-ſeed. The beginning of October, ſhe firſt complained of a little pain or ſmarting from the ſinapiſm (which had been repeated by intervals) in one of her great toes, and by degrees ſhe recovered the ſenſe and motion of her limbs. She learned to walk like a child, catching hold of every thing near her, or ſupporting herſelf betwixt two people: ſoon after, ſhe could walk with a ſingle prop, but it was ſome time before ſhe truſted herſelf alone. About the middle of this month (October) ſhe could walk perfectly well; and there only remained, of all her complaints, a ſlight motion of her arm and hand, which went off in the following manner. On the 20th of the ſame month, having ſuffered extremely from the cold in ſeeing the Lord Mayor's Shew, ſhe was ſeized with a pain in the ſhoulder of the moving arm: this increaſed; and when ſhe came home, grew extremely uneaſy. That night, as ſhe was ſitting by the fire, the arm all at once was raiſed upwards with a jerk and great pain, and the hand fixed upon the top of the ſhoulder, where it remained immoveable. Her aunt, who ſat by her, attempted to bring it down, but to no purpoſe, the parts being all rigid; but after a good deal of friction, and bathing with camphorated ſpirits of wine, the muſcles relaxed, the arm came down, and the involuntary motion ceaſed. From that day ſhe enjoyed good health, was free from all her complaints, except that ſometimes, on any great motion or ſudden fright, ſhe had a little agitation in her arm, which ſoon went off. It may not, perhaps, be amiſs to obſerve, that ſhe had never had any appearance of the female periodical diſcharges.

CASE LXV.

A ſecond Infection of the Small-Pox.

A Young gentleman, ill of that ſort of ſmall-pox which is called the coherent, or intermediate between the diſtinct and confluent kind, on Wedneſday the 3d of October, being the ſixth day from the eruption, grew delirious in the night, and got out of bed in ſpite of two nurſes who attended him; and ſeizing one of them by the neck between his bare arms, he preſſed his forehead, then covered with the ſmall-pox in the ſtate of maturation, againſt her naked breaſt, and held her for ſome time in that poſture: ſhe was heated by ſtriving with him; and in ſtruggling to get looſe, ſhe was ſenſible that ſhe bruiſed and broke ſome of the puſtules with her forehead. This woman was about forty years of age, of a clear, florid, ſanguine complexion; ſhe told the doctor ſhe had had the ſmall-pox when about ſeven or eight years of age, and had been pretty full of them, though ſhe bore no marks. On Friday morning the ſmall-pox began to appear upon her forehead, and increaſed by degrees to between fifty and ſixty; ſhe had likewiſe a few puſtules on the back part and ſides of her neck, where the patient had graſped her with his naked arms, but had none, as ſhe told the doctor, on any other part of her body; the lower part of her face was entirely clear of them, and thoſe upon her forehead were chiefly confined to the middle and moſt prominent part of it, which had been preſſed againſt the patient's breaſt. They roſe gradually, and came to maturity, in the ſame manner as the ſmall-pox of the middle coherent kind, with a great inflammation and ſwelling of her forehead, and the adjoining part of her face, eſpecially between the eye-brows, where a ſmall cluſter of the puſtules were ſeated; and on the 9th of October, her right-eye was quite cloſed up, and the left almoſt in the ſame condition: but all this time ſhe had no fever, ſickneſs, or other ſymptom of the ſmall-pox, beſide this eruption, and the inflammation and pain that attended it. That night ſhe had a bliſter applied to her neck; in conſequence of which ſhe recovered the ſight of her eye the next day, being the ſixth from the eruption, when the puſtules were turning and beginning to ſcab. The ſcabs agreed with thoſe of the milder coherent ſort in their appearance and duration. The doctor ſaw her ſeveral times after this, particularly on Monday the 22d of October, which was the eighteenth day from the eruption of the puſtules, when ſhe had ſtill ſome part of the ſcabs remaining on her forehead.

CASE LXVI.

Of the Effect of Mezereon in removing Venereal Nodes.

THOMAS DUFF, drummer in the thirteenth regiment, aged about thirty years, was admitted into George's Ward, in St. Thomas's Hoſpital, on the 24th of April 1766.

The account he gave of his complaints was, that he contracted the venereal diſeaſe about the latter end of the year 1764, and had a bubo opened in his groin in January 1765; but that, by the uſe of mercurial medicines, though without ſalivation, his complaints were removed; and he remained apparently well till the June following, when, after a long fatiguing march, he complained of an excruciating head-ach, and chiefly in the night; ſoon after this, a ſwelling appeared upon the cheek-bone, under the right-eye, and his head-ach ſomewhat abated: about two months after, another tumour of the ſame kind appeared over the left orbit; ſeveral others in a little time were found upon the ſkull; and about three weeks before his admiſſion, he had obſerved a conſiderable tumour on the left ſhin-bone: he had taken many medicines, but the ſwellings ſtill grew larger, and his ſtrength decreaſed daily.

The following is an account of the ſtate in which he was found upon his admiſſion to the hoſpital, viz. one large tumour, about the ſize of half a ſmall orange, in the middle of the front of his head; and on each ſide of it was another, about the ſize of half a walnut: on the ſide of his head were two other tumours; one the ſize of half a pullet's egg, the other ſomewhat ſmaller: all theſe were of the natural colour of the ſkin, and not painful to the touch. The large one felt ſomewhat ſoft in the middle, as did alſo one of thoſe upon the ſide; the others were hard. Upon the riſing of the right cheek-bone, near the orbit, was a tumour, the ſize of a walnut; and over the left orbit was another ſimilar to it; the teguments over theſe laſt were ſomewhat red and enflamed; and, upon examination, it was the opinion of ſome that they contained a fluid. The node on the left-ſhin was near the middle of the bone, about three inches long, roſe conſiderably, and was as hard to the touch as any other part of the bone.

To this muſt be added, that the man was greatly emaciated, and ſo much weakened, that he could hardly walk; that his pulſe was lower and quicker than natural, and that he was much troubled with nocturnal pains.

Under all theſe unpromiſing ſymptoms, he began the uſe of the decoction of mezercon on the 26th of April 1766. By the 20th of May the tumours were all diminiſhed, and his pains were ſomewhat abated. Upon examining his head, a new tumour was diſcovered towards the back part, about the ſize of half a large walnut, which felt as if it contained a fluid.

On the 3d of June he was directed to drink daily one pint and a half of the decoction; and about this time a ſmall pimple appeared on the tumour over the left-eye, which came to diſcharge ſome thin matter, but not in ſuch a quantity as could be ſuppoſed ſufficient to evacuate the contents of the tumour; and in a few days this little ſore dried up without any dreſſing.

On the 17th of June, half a ſpoonful of the ſolution of ſublimate was mixed with his daily quantity of the decoction; but having caught cold, and complaining of a pain in his breaſt, it was continued but two days.

By the beginning of July he had much recovered his ſtrength and fleſh, and he looked more healthy; the ſtate of the tumours was then as follows: that on the ſhin, thoſe near the orbits, the two ſmall ones on the fore part of the head, the lower one on the ſide, and that on the back part, were all ſo reduced as ſcarcely to be felt. The large node on the fore part of the head, and that near the crown, did not exceed one-half of their former height; yet their baſes were as at firſt, and they felt as if they contained a fluid. His pains were much leſſened, but were not entirely gone.

During this time no external application had been uſed, nor any internal medicine taken, except what has been mentioned; but now he was directed to take one ſpoonful of the ſolution of ſublimate twice a day, with the decoction of mezercon.

On the 15th of July, the large node on the fore part of the head was opened; it contained no fluid, but the pericranium and the integuments were much diſeaſed, and the bone was carious: hereupon it was found neceſſary to remove the integuments, and lay the whole extent of the carious bone bare for exfoliation.

The node upon the crown was opened in the ſame manner a few days after, and the bone was found carious as in the other.

No veſtige now remained of any of the other tumours; but the patient was ordered to continue the two pints of the decoction of mezereon, with two ſpoonfuls of the ſublimate ſolution, daily; and as he ſeemed well in health, he was ſuffered to go abroad.

About the latter end of September, an exfoliation was obtained from that node which was opened near the crown; and the other upon the fore part of the head ſeemed in a fair way, ſo that he took ſtill greater liberties as to going abroad, and his medicines were but ſeldom taken for theſe few laſt weeks; which was, however, diſregarded, as he ſeemed ſo well, till towards the end of October, when he complained of a pain in his arm: this he had ſometimes done before upon change of weather; but as he had had a rheumatic pain in his knee, which gave way to a bliſter, and a few doſes of Dover's ſweating-powder, it was looked upon to be of the ſame kind.

The arm was now examined, and a thickening of the higher arm-bone, a little above the middle, was very obſervable; it extended quite round the bone, and ſeemed like an overgrown callus, but was larger at the anterior and poſterior parts than at the ſides; it gave him no pain upon preſſure, but for above a week had been very painful in the night: as he had never himſelf obſerved any tumour, it is not poſſible to aſcertain how long it had been there.

He was now ordered the decoction made with double the proportion of mezereon root, but his ſtomach would not bear it; ſo he was deſired to drink three pints in a day of the uſual decoction.

On the 11th of November, the tumour on the arm was leſſened; a ſmall quantity of the ſtrong mercurial ointment was ordered to be rubbed upon the affected arm every night, and his decoction continued: this, in a few days, affected his mouth, and brought on a ſpitting, which was encouraged by the continuance of the ſame ſmall quantity of mercurial ointment, with ſome few intermiſſions, for a month, continuing the decoction to two pints daily during the whole time.

The pain in the arm went off a few days after he began to ſpit, and the node on the arm was gone in about three weeks.

On the 24th of December, an exfoliation caſt off from the fore part of the head, and the man remained in perfect good health, excepting the ſore.

CASE LXVII.

Of a ſchirrhous Humour in the Breaſt.

A Surgeon being ſent for to a gentlewoman at Lewes, in Suſſex, who had been brought very low by a fever, which from her cough, ſharp pain under her breaſt, and other ſymptoms, was judged pleuretic; but upon a diſcharge from her breaſt of a thin whey-like matter, or gleet, all the ſymptoms vaniſhed. When the ſurgeon ſaw her firſt, the liquor was diſcharged by a ſmall pin-hole near the nipple, and was little more than would have wetted a handkerchief four times doubled. Upon examining the breaſt, he found a large tumour, which lay deep, yielding to his fingers, and pitting like dough. He ſearched the abſceſs with his probe, and twiſted out with it a matter like ſaw-duſt, or bran mixed with hair. Upon laying open the breaſt, he ſeparated a tumour in a cyſt or bag, which weighed eight ounces, and contained a ſolid matter like that above mentioned, mixed with a ſubſtance reſembling hair. Upon enquiring into the riſe of this tumour, the patient told him that, thirty-eight years before, ſhe had received a contuſion in that breaſt by a fall from a horſe, which was attended with great pain and fluxion, ſo that the veins of her breaſt appeared knotty and diſtended as in a cancer; but her pain ceaſing, they ſunk, and left an indolent tumour in her breaſt, ſuppoſed by her ſurgeon to be a true ſchirrhus; ſince which time it always continued nearly in the ſame ſtate, without pain, encreaſing very little in bulk, but obſtructed in ſuch a manner, that ſhe could not nurſe her children with that breaſt.

CASE LXVIII.

Of a Man who was killed by ſwallowing melted Lead.

ON Thurſday, the 4th of December, 1755, at three in the afternoon, Henry Hall, of Eaſt Stonehouſe, near Plymouth, aged ninety-four years, of a good conſtitution, and extremely active for one of that age, being one of the three unfortunate men who ſuffered by the fire at the light-houſe at Eddyſtone, nine miles from Plymouth, having been greatly hurt by that accident, with much difficulty returned to his own home; and a ſurgeon being ſent for to his aſſiſtance, found him in his bed, complaining of extreme pains all over his body, eſpecially in his left-ſide, below the ſhort ribs, in the breaſt, mouth, and throat. He ſaid likewiſe, as well as he could, with a hoarſe voice ſcarce to be heard, that melted lead had run down his throat into his body.

Having taken the proper care of his right-leg, which was much bruiſed and cut on the ſkin, the ſurgeon examined his body, and found it all covered with livid ſpots and bliſters, and the left-ſide of the head and face, with the eye, extremely burnt; which having waſhed with linnen dipped in an emollient fomentation, and having applied things uſed in caſes of burning, he then inſpected his throat, the root of his tongue, and the parts contiguous, ſuch as the uvula, tonſils, &c. which were greatly ſcorched by the melted lead. Upon this he ordered him to drink frequently of water-gruel, or ſome ſuch draught; and returning to his houſe, ſent him the oily mixture, of which he took often two or three ſpoonfuls.

The next day he was much worſe, all the ſymptoms of his caſe being heightened, with a weak pulſe, and he could now ſcarce ſwallow at all.

The day following there was no change, except that, on account of his too great coſtiveneſs, he took ſix drams of manna, diſſolved in an ounce and a half of infuſion of ſenna, which had no effect till the day following, when, juſt as a clyſter was going to be adminiſtered, he had a very fœtid diſcharge by ſtool.

That day he was better till night, when he grew very feveriſh.

The next day (having ſlept well the preceding night, and thrown up, by coughing, a little matter) he was much better.

He began now to ſpeak with leſs difficulty, and for three or four days to recover gradually; but then ſuddenly grew worſe, his pulſe being very weak: his ſide, which grew worſe daily from the firſt, now reddened a little, and ſwelled, to which a plaiſter of gums was applied: but all methods proved ineffectual; for the next day, being ſeized with cold ſweats, and ſpaſms in the tendons, he ſoon expired.

Examining the body, and making an inciſion through the left-ſide of the belly, the ſurgeon found the diaphragmatic upper mouth of the ſtomach greatly inflamed and ulcerated, and the coat in the lower part of the ſtomach burnt; and from the great cavity of it he took out a large piece of lead, which weighed exactly ſeven ounces, five drams, and eighteen grains.

It will, perhaps, be thought difficult to explain the manner by which the lead entered the ſtomach. But the account which the deceaſed gave was, that as he was endeavouring to extinguiſh the flames, which were at a conſiderable height over his head, the lead of the lanthorn being melted, dropped down, before he was aware of it, with great force into his mouth, then lifted up and open; and that in ſuch a quantity, as to cover not only his face, but all his cloaths.

CASE LXIX.

Of a Boy who never made Water.

JOHN WORSNAPE, a poor boy at North Bierley, Yorkſhire, lived till he was 17 years old, and never made water, and yet was in perfect health, vigorous, and active. He had conſtantly a diarrhœa upon him, but without much uneaſineſs. The obſtruction muſt have been in his kidnies, for he had never any inclination to make water. He died of a fever, the cauſes of which appeared to be very remote from this obſtruction.

CASE LXX.

Of ſome extraordinary Effects of a checked Salivation.

A Girl of 17 years old, born of reputable parents, in the pariſh of Deptford, in Kent, of a healthy conſtitution, and inclining to be fat, had never had any conſiderable illneſs, excepting the ſmall pox, till July 1754, when ſhe caught a great cold, which at firſt cauſed only a ſwelling of the glands about the throat, and a violent tooth-ache, which was ſoon removed upon drawing two teeth; at which operation, however, ſhe was greatly terrified: ſoon after this, ſhe was ſeized with a drowzineſs, and ſuch a numbneſs in her legs and feet, that it was painful for her to walk. After having tried ſeveral remedies, but to no purpoſe, ſhe came to the London Hoſpital, where ſhe was admitted an out-patient in the beginning of Auguſt following, and was cured in a little time of the numbneſs and drowzineſs; but as the glands continued ſwollen, ſhe was ordered to take a few mercurial pills, and likewiſe ſome purgatives, at proper intervals, in order to prevent a ſalivation; but unfortunately ſhe neglected taking the purgatives, and was otherwiſe wanting in a proper care of herſelf, by which, in about a week's time, ſhe was thrown into a gentle ſalivation. This happened on the 2d of September: upon this, her friends confined her to her bed; but being one day extremely thirſty, and her mouth very hot and dry, ſhe got up in her ſhift, though in a profuſe ſweat, in order to look for ſomething cold to drink; when finding nothing but ſome red wine, ſhe took a hearty draught of it: this was no ſooner down, than ſhe found it lay very cold on her ſtomach, and immediately felt a pain an inch to the right of the ſeat of the heart; and from that inſtant her ſalivation ceaſed. However, ſhe felt no bad effect from it till near a week after, when ſhe began to ſpit up her victuals, by a little at a time; which in four days changed to a gentle vomiting, and kept increaſing to ſuch a degree, that in a few days more ſhe could abſolutely keep nothing upon her ſtomach, throwing up immediately whatever ſhe took. In this ſituation ſhe continued almoſt two months before ſhe applied to the London Hoſpital, where ſhe was received into the houſe on the 10th of December 1754. But as ſhe was very ſenſible that ſhe had not followed the directions given her, and that through her own miſconduct ſhe had brought a conſiderable part, if not the whole, of this diſorder upon herſelf, ſhe concealed her having been in a ſalivation, and every circumſtance, either attending or ſubſequent to it, profeſſing herſelf entirely ignorant of what might be the cauſe of her complaint: upon this, ſhe was treated in the manner which appeared moſt ſuitable to her caſe. She was firſt blooded, and then had a gentle vomit given her; after which ſhe took a pleaſant cordial with ſome laudanum in it: the vomit was repeated the two following days, and the opiate increaſed every day in the cordial; but they all came up ſo equally faſt, that it would have been impoſſible, from the operation, to determine which was the cordial draught, and which was the emetic. After this, ſome ſoft, relaxing, lubricating purges, and oily emulſions, were ordered to be taken in the ſmalleſt quantities at a time, while warm fomentations, or ſoft cataplaſms, were applied to the ſtomach and bowels, and emollient oily clyſters were thrown up: during this courſe ſhe went alſo four times to the warm bath, but all to no purpoſe; her pain in the pit of the ſtomach, though never very violent, yet ſtill continued fixed in the ſame manner, and her vomiting was not in the leaſt diminiſhed. As the ſoft relaxing method did not anſwer, warmer applications were uſed externally; and the richeſt cordials, as well as the warmeſt ſtomachics of every kind, were given her, but with as little ſucceſs; and however ſmall the quantity ſhe took, it came up almoſt the very inſtant it was ſwallowed: thus, twenty drops of laudanum, one dram of crude mercury, or one ſingle grain of opium, or whatever might be given her, was vomited up immediately.

It is very remarkable that the probang, which was often introduced into the ſtomach, did not ſeem to meet with any reſiſtance in it's way, or about the orifice of it; and that yet nothing of what ſhe vomited was frothy, or mixed with any humour of the ſtomach, had any of that ſmell peculiar to vomitings, or was altered in any reſpect. She had always been extremely regular in her periodical evacuations ever ſince ſhe was fourteen years old; and even a fortnight after her vomitings took her, ſhe had a ſmall ſhew of them: her ſkin was extremely dry; and even after the warm bath, there was never the leaſt appearance of any perſpiration: her ſtools ceaſed immediately upon her being taken with theſe vomitings, but ſhe made, once in ten or twelve days, an ounce, or rather more, of a very high-coloured urine. This, and indeed her keeping alive all this while, ſhewed that a conſiderable part of the liquids ſhe took was immediately abſorbed by the veins of the mouth and gullet, which, in her ſituation, might very naturally be ſuppoſed extremely thirſty; and though ſhe ſeemed to vomit up the whole of what ſhe ſwallowed, and was greatly fatigued with it, yet ſhe conſtantly ſaid ſhe found herſelf ſtrengthened by eating broth or ſpoon-meats; not but ſhe waſted every day more and more, ſo as now to be ſcarce able to walk or ſtand. In this condition it was thought adviſeable that ſhe ſhould take a clyſter twice a day, made of near a pint of ſtrong mutton-broth, with the yolk of an egg diſſolved in each: after this had been repeated for three days, and was found to be totally abſorbed, ſo that not the leaſt part of it came away, ſhe was deſired to abſtain from ſwallowing any thing for one week at leaſt, in hopes that the ſtomach might poſſibly recover itſelf by this reſt: an hour after each clyſter ſhe made almoſt half a pint of water, which was about half of the clyſter, but nothing came away by ſtool. It is ſurprizing how much, and how faſt ſhe mended by this method; in the firſt ten days her ſpirits grew better, her ſtrength increaſed, and her fleſh ſeemed to grow firmer. After ſhe had continued theſe clyſters for a fortnight, during which time ſhe faithfully abſtained from ſwallowing any thing whatever, (for which reaſon alſo ſhe had not vomited once, and yet her mouth and throat were no ways dry) it was expected that her diſeaſe might be ſo far overcome, and her ſtomach ſo far recovered, that ſhe might now ſafely venture to ſwallow ſome ſmall quantity of liquids, by a little at a time, and which indeed ſhe was very deſirous of taking, as ſhe found a heat and irritation from the ſo frequent introduction of the clyſter-pipe; but upon ſwallowing a ſpoonful of broth, ſhe was immediately convinced that her ſtomach ſtill continued in the ſame unhappy ſituation, and that there was not the leaſt alteration or amendment in her complaint.

Finding that no manner of advantage had been got over the diſorder, which continued equally ſtrong and obſtinate; and ſeeing the perfect abſorption of the clyſters, it was thought adviſeable to try once more the effect of medicines, and eſpecially to ſee, when given that way, what they could produce; and for that reaſon, having obſerved in her a total want of perſpiration, it did not ſeem unlikely that, if ſhe could be brought to ſweat a little, this affection of the ſtomach might, in ſome meaſure, be removed, if not totally cured; but as, at the ſame time, this was the only way left to keep her alive, none but the moſt gentle perſpiratives were uſed; nor indeed, as they did not anſwer in the leaſt, did it ſeem prudent to inſiſt upon a long uſe of them. After this, a ſmall decoction of the bark, with fifteen grains of liquid laudanum, were likewiſe tried in a clyſter; but it ruffled her extremely, and came away very ſoon; which was the firſt thing ſhe had voided by ſtool ever ſince ſhe had the vomiting.

Thus having continued to try one thing, and then another, from the 12th of December to the 4th of March following, without the leaſt benefit; and finding that this unhappy girl was as far from a cure as the moment ſhe came into the houſe, the clyſters but barely keeping her alive, it was determined to ſend her out of the houſe; but firſt to deſire her to relate again, with the greateſt exactneſs, every circumſtance preceding her vomiting, ſince what might perhaps appear trifling to her, might poſſibly be of the greateſt conſequence; and, withal, ſhe was given to underſtand, that unleſs ſhe could recollect ſomething more than what ſhe had already declared, or could throw ſome new lights upon her caſe, it would be in vain to flatter herſelf with any hope of amendment, or to attempt any thing farther towards a cure, as every medicine or method had been tried which had the leaſt probability of ſucceſs. She then begged pardon, and ſaid ſhe had concealed a circumſtance, which ſhe was now afraid was a material one; but as ſhe had been much to blame in it, and was conſtantly in hopes that it would have been of no conſequence, ſhe had not dared to mention it for fear of giving offence: and then ſhe told the whole concerning her ſalivation, and the manner in which it was ſtopped, as is related above.

Being now poſſeſſed of the true cauſe of her vomiting, it was determined to reſtore her, if poſſible, to that ſtate from which ſhe had been ſo ſuddenly removed, as it was evident that the mercury, which had begun a ſalivation, had not been evacuated in any manner, but was ſtill lodged in the body; and for this reaſon it was thought proper, as the only means left to lay hold of it, to rub in ſome more, in hopes that it might put that in motion, which was in all appearance the true cauſe of all this diſorder. Accordingly, a dram of the ſtrong mercurial ointment was ordered to be rubbed in upon her legs and thighs, twice a day, for three days: on the fourth day, a gentle ſalivation began, which had no ſooner made it's appearance, than ſhe felt the pain or bar acroſs the ſtomach abate, and immediately a kind of eaſe and relaxation followed; upon which ſhe deſired a little barley-water to drink, which, to her great and unſpeakable ſatisfaction, did not come up. Not long after, ſhe was tempted, more from curioſity than thirſt, to take a hearty draught of it; this likewiſe ſtaid, and gave her not the leaſt uneaſineſs. Finding herſelf thus relieved, ſhe called for ſome broth, and had ſome bread put into it; this ſhe reliſhed extremely; and what is ſurprizing, though ſhe had continued for five months without ſwallowing any thing that could be ſuppoſed to reach her ſtomach, yet theſe things ſhe now took did not cauſe the leaſt weight or uneaſineſs when they got down: on the contrary, ſhe continued to eat and drink as the other people in the ward; upon which ſhe recovered her ſpirits and ſtrength every day more and more, ſhe began to have regular ſtools, and made water as when in health.

The ſalivation was continued a little more than a fortnight, and made to leſſen by inſenſible degrees: after it ceaſed, ſhe felt no uneaſineſs or inconvenience in any reſpect; and being perfectly cured of all her complaints, was at length diſcharged out of the hoſpital on the 1ſt of April 1755.

CASE LXXI.

Of extraordinary Symptoms followed by the Small-Pox.

A Lady was ſeized with the ſmall-pox, which proved to be of the confluent ſort; and in the courſe of this diſeaſe, during which ſhe was attended by the late Sir Hans Sloane, ſeveral threatening ſymptoms appeared, which, however, were at length overcome, and the patient, being thought out of danger, took ſeveral doſes of ſuch purgative medicines as are uſually adminiſtered in the decline of the diſeaſe without any bad conſequence.

But in the evening of the day on which ſhe had taken the laſt doſe that was intended to be given her on that occaſion, ſhe was ſuddenly ſeized with pain and convulſions in the bowels; the pain, and other ſymptoms, became gradually leſs violent as the force of the medicine abated; and by ſuch remedies as were thought beſt adapted to the caſe, they ſeemed at length to be entirely ſubdued.

They were, however, ſubdued only in appearance; for at eleven o'clock in the forenoon of the next day, they returned with great violence, and continued ſome hours: when they went off, they left the muſcles of the lower jaw ſo much relaxed that it fell down, and the chin was ſupported on the breaſt. The ſtrength of the patient was ſo much exhauſted during this paroxyſm, that ſhe lay near two hours with no other ſign of life than a very feeble reſpiration, which was often ſo difficult to be diſcerned, that thoſe about her concluded ſhe was dead.

From this time the fits returned periodically every day at about the ſame hour. At firſt they ſeemed to affect her nearly in the ſame degree, but at length all the ſymptoms were aggravated; the convulſions became more general, and her arms were ſometimes convulſed alternately; it alſo frequently happened, that the arm which was laſt convulſed remained extended and inflexible ſome hours after the ſtruggles were over. Her neck was often twiſted with ſuch violence, that the face looked directly backwards, and the back part of the head was over the breaſt; the muſcles of the countenance were alſo contracted and writhed with the ſpaſms, ſo that the features were totally changed, and it was impoſſible to find any reſemblance of her natural aſpect by which ſhe could be known. Her feet were not leſs diſtorted than her head, for they were twiſted almoſt to diſlocation at the inſtep, ſo that ſhe could not walk but upon her ancles.

To remove or mitigate theſe deplorable ſymptoms, many remedies were tried, and, among others, the cold bath; but either by the natural effect of the bath, or by ſome miſmanagement in the bathing, the unhappy patient firſt became blind, and ſoon afterwards deaf and dumb. It is not eaſy to conceive what could increaſe the miſery of deafneſs, dumbneſs, blindneſs, and frequent paroxyſms of excruciating pain: yet a very conſiderable aggravation was added; for the loſs of her ſight, her hearing, and her ſpeech, were followed by ſuch a ſtricture of the muſcles of her throat, that

ſhe

ſhe could not ſwallow any kind of aliment, either ſolid or liquid. It might reaſonably be ſuppoſed that this circumſtance, though it added to the degree of her miſery, would have ſhortened it's duration; yet in this condition ſhe continued near three quarters of a year, and during that time was ſupported in a very uncommon manner, by chewing her food only, which having turned often, and kept long in her mouth, ſhe was obliged at laſt to ſpit out. Liquors were likewiſe gargled about in her mouth for ſome time, and then returned in the ſame manner, no part of them having paſſed the throat by an act of deglutition; ſo that, whatever was conveyed into the ſtomach, either of the juices of the ſolid food, or of the liquids, was either gradually imbibed by the ſpongineſs of the parts which they moiſtened, or trickled down in a very ſmall quantity along the ſides of the veſſels.

But there were other peculiarities in the caſe of this lady yet more extraordinary. During the privation of her ſight and hearing, her touch and ſmell became ſo exquiſite, that ſhe could diſtinguiſh the different colours of ſilk and flowers, and was ſenſible when any ſtranger was in the room with her.

After ſhe became blind, deaf, and dumb, it was not eaſy to contrive any method by which a queſtion could be aſked her, and an anſwer received. This, however, was at laſt effected, by talking with the fingers, at which ſhe was uncommonly ready. But thoſe who converſed with her in this manner were obliged to expreſs themſelves by touching her hand and fingers inſtead of their own.

A lady, who was nearly related to her, having an apron on that was embroidered with ſilk of different colours, aſked her, in the manner which has been juſt deſcribed, if ſhe could tell what colour it was; and after applying her fingers attentively to the flowers of the embroidery, ſhe replied, that it was red, blue, and green, which was true; but whether there were any other colours in the apron, the writer of this account does not remember. The ſame lady having a pink-coloured ribband on her head, and being willing ſtill farther to ſatisfy her curioſity and her doubts, aſked what colour that was. Her couſin, after feeling it ſome time, anſwered, that it was a pink colour. This anſwer was yet more aſtoniſhing, becauſe it ſhewed not only a power of diſtinguiſhing different colours, but different kinds of the ſame colour; the ribband was not only diſcovered to be red, but the red was diſcovered to be of the pale kind, called a pink.

This unhappy lady, conſcious of her own uncommon infirmities, was extremely unwilling to be ſeen by ſtrangers, and therefore generally retired to her chamber, where none but thoſe of the family were likely to come. The ſame relation, who had by the experiment of the apron and ribband diſcovered the exquiſite ſenſibility of her touch, was ſoon after convinced, by an accident, that her power of ſmelling was acute and refined in the ſame aſtoniſhing degree.

Being one day viſiting the family, ſhe went up to her couſin's chamber; and after making herſelf known, ſhe intreated her to go down and ſit with her among the reſt of the family, aſſuring her that there was no other perſon preſent. To this ſhe at length conſented, and went down to the parlour-door; but the moment the door was opened, ſhe turned back, and retired again to her chamber much diſpleaſed, alledging that there were ſtrangers in the room, and that an attempt had been made to deceive her. It happened, indeed, that there were ſtrangers in the room, but they had come in while the lady was above ſtairs, ſo that ſhe did not know they were there. When ſhe had ſatisfied her couſin of this particular, ſhe was pacified; and being afterwards aſked how ſhe knew there were ſtrangers in the room, ſhe anſwered, by the ſmell.

But though ſhe could by this ſenſe diſtinguiſh in general between perſons with whom ſhe was well acquainted and ſtrangers, yet ſhe could not ſo eaſily diſtinguiſh one of her acquaintance from another, without other aſſiſtance. She generally diſtinguiſhed her friends by feeling their hands; and when they came in, they uſed to preſent their hands to her, as a means of making themſelves known: the make and warmth of the hand produced, in general, the differences that ſhe diſtinguiſhed; but ſometimes ſhe uſed to ſpan the wriſt and meaſure the fingers. A lady, with whom ſhe was well acquainted, coming in one very hot day, after having walked a mile, preſented her hand as uſual: ſhe felt it longer than ordinary, and ſeemed to doubt whoſe it was; but after ſpanning the wriſt, and meaſuring the finger, ſhe ſaid, 'It is 'Mrs. M. but ſhe is warmer to-day than 'ever I felt her before.'

To amuſe herſelf in the mournful and perpetual ſolitude and darkneſs to which her diſorder had reduced her, ſhe uſed to work much at her needle, and it is remarkable that her needle-work was uncommonly neat and exact: among many other pieces of her work that were preſerved in the family, was a pin-cuſhion, which perhaps could ſcarce be equalled. She uſed alſo ſometimes to write, and her writing was yet more extraordinary than her needle-work: it was executed with the ſame regularity and exactneſs; the character was very pretty; the lines were all even; and the letters placed at equal diſtances from each other. But the moſt aſtoniſhing particular of all, with reſpect to her writing, was, that ſhe could by ſome means diſcover when a letter had, by miſtake, been omitted, and would place it over that part of the word where it ſhould have been inſerted, with a caret under it. It was her cuſtom to ſit up in bed at any hour of the night, either to write or to work, when her pain, or any other cauſe, kept her awake.

Theſe circumſtances were ſo very extraordinary, that it was long doubted whether ſhe had not ſome faint remains both of hearing and ſight; and many experiments were made to aſcertain the matter: ſome of theſe experiments ſhe accidentally diſcovered, and the diſcovery always threw her into violent convulſions. The thought of being ſuſpected of inſincerity, or ſuppoſed capable of acting ſo wicked a part, as to feign infirmities that were not inflicted, was an addition to her miſery which ſhe could not bear, and which never failed to produce an agony of mind not leſs viſible than thoſe of her body. A clergyman, who found her one evening at work by a table with a candle upon it, put his hat between her eyes and the candle, in ſuch a manner that it was impoſſible ſhe could receive any benefit from the light, if ſhe had not been blind. She continued ſtill at her work with great tranquillity, till putting up her hand ſuddenly to rub her forehead, ſhe ſtruck it againſt the hat, and diſcovered what was doing; upon which, ſhe was thrown into violent convulſions, and was not, without great difficulty, recovered. The family were, by theſe experiments, and by ſeveral accidental circumſtances, fully convinced that ſhe was totally deaf and blind; particularly by her ſitting unconcerned at her work during a dreadful ſtorm of thunder and lightning, though ſhe was then facing the window, and always uſed to be much terrified under ſuch circumſtances. But Sir Hans Sloane, her phyſician, being ſtill doubtful of the truth of facts which were ſcarce leſs than miraculous, he was permitted to ſatisfy himſelf by ſuch experiments and obſervations as he thought proper, the iſſue of which was, that he pronounced her to be abſolutely deaf and blind.

She was at length ſent to Bath, where ſhe was in ſome meaſure relieved; her convulſions being leſs frequent, and her pains leſs acute; but ſhe never recovered her ſpeech, her ſight, or her hearing, in the leaſt degree.

CASE LXXII.

Of a Diabetes, with unuſual Symptoms.

A Lady of great ſenſibility of temper, and fine genius, rather corpulent than otherwiſe, though advancing in years, had enjoyed, through the former part of her life, an almoſt uninterrupted ſeries of good health; till, about ſix years ago, ſhe felt herſelf ſuddenly attacked with a ſenſation of thirſt, hardly tolerable; and this was ſhortly after attended with a notable waſting away of her healthful corpulency, with great dejection of ſpirits, a ſlight pain in both her ſides, and with a pricking uneaſineſs round her waiſt: however, thoſe complaints were ſo little regarded for above two years, that ſhe conſulted no regular medical adviſer all that time; till at length, one day, by ſome accident, ſhe happened to diſcover that her urine ſmelled, and taſted exceedingly ſweet, as honey itſelf, without retaining, in any degree, it's natural urinous flavour. This circumſtance quickly alarmed her ſo much, that ſhe immediately applied to ſome intelligent perſon; who finding the quantity of her daily urine alſo unuſually increaſed, acquainted her that ſhe laboured under a ſlight degree of the diabetes. After this, ſhe ſoon found herſelf incommoded with palpitations and ſpaſmodic twitchings in divers parts, ſometimes in her neck, at others in her back, &c. She added, that ſhe remembered the palpitations of her heart were very remarkable from the firſt. For theſe complaints a journey to Briſtol Wells was recommended, and there ſhe was deſired to amuſe herſelf with chearful company, and to drink thoſe waters on the ſpot: ſhe accordingly complied, and reſided there ten weeks; during which, by advice of a phyſician, ſhe was blooded once, and took ſmall doſes of rhubarb every three or four days, with intent to excite at moſt two or three ſtools extraordinary; by which method, before the end of her ſtay, ſhe gradually became ſo much better, that ſhe concluded herſelf perfectly recovered, till juſt before ſhe had appointed to leave Briſtol, that her anxiety about returning to London brought back her thirſt, parched tongue, and ſweet urine, almoſt as bad as ever. This circumſtance determined her to poſt away to Bath, where two eminent phyſicians, in conſultation, recommended iſſues to be made above her knee, thereby meaning to ſubſtitute a gradual drain, in lieu of that which nature, ſome years before, had quite ſuppreſſed. Theſe gentlemen farther urged her to drink the Bath waters, ſo as to give the ſame a fair trial; and, in compliance with their advice, ſhe ſtaid full five months, living there very quiet and ſtill, and interpoſing ſome gentle evacuations by calomel purges; by which method ſhe again gained ground, and only now and then ſuffered the ſymptom of uncommon thirſt, which occaſionally returned, oftener even than her urine became ſweetiſh. Thus ſhe lived, on the whole, not very much incommoded, till about the end of March 1766, when the death of a relation, and more bodily fatigue than ordinary, brought back again the dejection of her ſpirits, fluttering at her heart, with convulſive catchings all over her, though momentary and irregular, and an univerſal laſſitude of her limbs. In this condition ſhe conſulted a new phyſician, who, on feeling her pulſe, found it beat ſtrong and full for ſeven or eight ſtrokes, but then a ſudden ſtoppage enſued for near half as long an interval as he had counted the pulſe before; and thus for ſeveral days went on, alternately ſtopping and renewing, though with conſiderable variety in the periods of time; and after the long periods of ſuch ſtoppings, her heart would ſuddenly beat ſo loud, that ſhe thought, at the enſuing ſtoppage, it had often done making it's laſt effort to puſh on her lazy blood (as ſhe termed it.) The intervals of theſe ſtoppages were very various; for ſome days four, five, ſix, ſeven, and once eight ſeconds of a ſtop-watch, (no inconſiderable period, when carefully meaſured) before her pulſe renewed.

Whatever might be the cauſe of this irregularity, the method of cure ſeemed to be plainly taking away a proper quantity of blood; and cupping, in her circumſtances, was judged the fitteſt method of doing this: and afterwards ſtimulating by the application of a bliſter, and emptying the bowels with *tinctura ſacra*, were thought expedient and likely, with the farther uſe of fifteen grains of aſafœtida, and double that quantity of levigated native cinnabar, thrice every twenty-four hours, to relieve her complaints. On the third day of her being in this courſe, and after cupping, the unequal tenor of her pulſe was greater than at firſt, for an interval of eight ſeconds was counted, without a ſingle ſtroke; yet, by perſevering only a ſhort time with punctuality in this courſe, all her ſymptoms gradually abated; and though ſhe was too ſoon wearied of her regularity in taking medicines, yet, by the above means, with the addition of half a grain of the martial flowers daily in each doſe, in ſix weeks ſhe recovered a perfect regularity of her pulſe, and was well enough to undertake a journey to Southampton the ſummer following, when ſhe bathed in the ſea-water, and drank of the ſame, though with greater moderation, indeed, than many people at ſuch places obſerve; and all the time ſhe was there, ſeemed perfectly well; but, ſoon after her return to London, the ſweet ſmell and taſte of her urine, unaccompanied with her former ſtoppage in her pulſe, returned partially; but theſe were removed ſoon by the following medines:

Take of the flowers of camomile powdered twenty-five grains—of the aromatic ſpecies three grains—of rhubarb powdered two grains: Mix.

This powder was taken about a week, three times a day, in a draught of camomile tea, or wine and water; and beſides this, ſhe drank every night and morning, for ſix weeks, about half a pint of alum whey, made by boiling from fifty to thirty grains of powdered roche alum, in a ſufficient quantity of new milk from the cow, to get a full pint of whey; and her ſpeedy recovery this time was principally aſcribed to the uſe of this whey, for ſhe continued quite well for months, without any relapſe.

CASE LXXIII.

Of a Stone in the Bladder formed on a Needle.

A Gentleman's daughter began, at two years of age, to be afflicted with cholic pains and difficulty of making water, which were commonly removed by clyſters, purgatives, diuretics, and ſome other medicines. When ſhe was three years old, her diſeaſe had more the appearance of gravel, for the ſevere pains were about the lower parts of the loins, or immediately at the extremity of the bladder; ſhe had partial obſtructions of urine, and frequent vomiting, but never complained of her back. Theſe ſymptoms, not yielding to her former medicines, ſhe was put into the warm bath; which, with injections, relieved her. She was ſo ſenſible of the benefit of the warm bath, that ſhe frequently deſired it, and ſometimes came unwillingly out of it.

Her pains and obſtructions of urine increaſed all the following year, the warm bath being the only medicine that gave her relief; for in it only ſhe made urine freely, at other times it either came away inſenſibly, or in very ſmall quantities at once.

When ſhe was four years and two weeks old, ſhe complained of great pain in the pudenda, putting her fingers there, as if ſhe would extract ſomewhat; all the external parts were greatly ſwelled and inflamed.

Her mother then ſent for a ſurgeon. Upon preſſing the right lip, he felt like a fluctuation of liquor in it; and on the poſterior part, there was ſome matter: the parts were fomented with warm milk, and an emollient poultice was laid upon them.

Next day the quantity of matter was greater, and ſhe was eaſier; but ſtill aimed at extracting what pained her. The ſame applications were continued.

On the ſecond day, her mother diſcovered a white hard ſubſtance in the paſſage, and the child was miſerably tortured with pain. In the evening, while a fomentation was applying, a ſtone fell into the baſon, which weighed then more than half an ounce, and was grown round a needle, the ends of which ſtood out.

The child was too young to give any account of what had happened to her ſo long before; and the parents knew of no needle ſhe had ſwallowed, or of any pains ſhe had ſuffered, till the colic pains, which are mentioned in the beginning of this caſe.

When this ſtone came away, there was neither blood nor matter with it, nor had ſhe paſſed any blood before. After bringing away the ſtone, the patient ſtill complained of gravel pains, and the urine flowing involuntarily, excoriated the ſkin.

CASE LXXIV.

Of an Emphyſema, occaſioned by Putrid Humours.

A Full-bodied, middle-aged ſailor, (Michael M'Cann, of the Modeſte man of war) was ſeized with a putrid fever and ſore throat. He was bled at the beginning, but his blood appearing in a looſe diſſolving ſtate, he was bled no more; a bliſter was alſo applied between his ſhoulders, which ſoon dried up.

About the ſeventh or eighth day of his diſeaſe, an emphyſematous ſwelling appeared in his face, neck, and all over his breaſt, eſpecially on the right-ſide. The ſkin was very greatly puffed up, and made a crackling noiſe under the fingers when touched, as if a half-blown dry bladder had been handled; and the patient was exceeding ſtiff and uneaſy with it.

The chief ſurgeon of the Navy Hoſpital, and the other ſurgeons attending, called in a phyſician of great eminence, who examined it with particular care, and found the ſwelling altogether windy, and a compleat emphyſema; and adviſed the fomenting it with ſharp vinegar and camphorated ſpirit of wine; and if that ſhould not ſucceed, to ſcarify it ſlightly: the ſwelling totally vaniſhed in two or three days, without any ſcarification, and he ſoon recovered from the fever; but he continued very weak for a long time, and remained very ſcorbutic, as he was before the fever, his gums being very ſpongy, and bleeding on the ſlighteſt touch, or rubbing.

In this caſe the emphyſema was generated merely by the putreſcence of the humours, as is frequently obſerved in a leſs degree, in and about the beginning of mortifications of the limbs. It is certain, from numberleſs experiments, that putridity, both in vegetable and animal ſubſtances, generates air, or rather raiſes it from a fixed to an elaſtic eſtate.

CASE LXXV.

Of an unaccountable Mortification.

A Man, aged thirty-one years, was fifteen years old, when the following misfortune befel him:

He felt a ſpaſm or cramp in his left hip, and the lower part of his leg. As this pain ſeized him pretty often, he conſulted a ſurgeon, who applied ſeveral plaiſters to the part affected, but without any relief to the patient. After thoſe fruitleſs efforts, the ſurgeon made about thirty-ſeven inciſions over the patient's whole leg, (which, to outward appearance, was become very brown) of which he was not at all ſenſible, unleſs when the inſtrument happened to grate upon the bone; the perioſteum, or membrane, which covers the bone, being ſtill ſound. His leg, however, grew daily blacker, and the pain continued both in the perioſteum, and in all the bones of the upper and lower part of the leg. At laſt, a black circle was obſerved round about the muſcles of the hip, as an indication of an approaching mortification. This circle appeared as viſibly as if it had been ſeparated with a knife from the other part; it ever after ſpread, and came to ſuch a head, that without any other help and cure, the fleſh began gradually to rot away from the bones, and at laſt quite fell off from the upper part of the leg, which preſerved it's ſoundneſs. After this, nothing was ſeen but the bare tendons or ſinews, hanging down like ſo many ſtrings or cords; there alſo remained a piece of the inferior muſcles of the hip, faſtened to the ſuperior part: at laſt, the tendons becoming dry, conſumed away; and after all, the leg itſelf; that is to ſay, the thigh-bone dropped off in ſuch a manner, that there remained about four inches between the bones and the fleſh, looſely hanging down from them. The fleſh at laſt grew up to the bones, without any manner of help, and faſtened itſelf to the bone; and in this ſound part the patient felt a great pain, whenever the weather proved tempeſtuous. It was remarkable, that at the ſame time the patient alſo perceived a ſwelling in the middle of the right-foot, the matter of which diſcharged itſelf through the toes, and was of ſo corroſive a nature, that it had conſumed all the toes but the little one. The ſurgeon at length healed up the wound; but after all, there was ſtill but little feeling or warmth in the foot.

CASE LXXXVI.

Of Retenſion of Urine cured by the Bark.

ON the 31ſt of July, one Mr. Stanton, aged about thirty, ſtrong and robuſt, who had never before been troubled with the gravel, ſtone, ſtrangury, or any pain or difficulty in the urinary paſſage, was at once taken with a total retenſion of urine; for which he was blooded in two or three hours time, from his firſt pain, and in two hours more he had a clyſter given him, which operated copiouſly by ſtool; but he could not make one drop of urine. At night, he took an anodyne diuretic mixture, to as little advantage. He was all this time in ſome pain, without any feveriſh ſymptom, not ſo much as thirſt.

On the firſt of Auguſt, in the morning, he took another clyſter, which operated very well, but without the deſired effect: on which account a warm bath was ordered, and ſome doſes of powdered millepedes and ſweet ſpirit of nitre, from which he found no benefit. It was then propoſed to ſound him, but he would not conſent, proteſting obſtinately that he would rather die; and he continued for two days more taking lenitive purges of caſſia, manna, and Epſom ſalts, with all the diuretic ſalts and oils, mixed with ſome narcotic and anodyne medicines in different forms, but all in vain: at laſt, ſome relaxation being ſuſpected, on the 4th of Auguſt ſome doſes of the bark were ordered, which produced ſuch a happy effect, that in an hour after taking the third dram of bark, he made ſome urine; and after taking ten drams, he was perfectly cured, and made water with great eaſe and in great plenty.

CASE LXXVII.

Of a Girl who ſpoke after ſhe had loſt her Tongue.

MARGARET CUTTING, a girl about twelve years old, of Wickham, in Suffolk, loſt her tongue by a cancer, which firſt appeared like a ſmall black ſpeck on it's upper ſurface, but ſoon eat away quite to the root. Though the ſurgeon had pronounced the caſe incurable, he ſtill uſed his beſt endeavours to relieve her; and as he was ſyringing of it, the tongue dropped out, and they received it into a plate, the girl, to their amazement, ſaying to her mother, 'Don't be frighted, mamma; it will 'grow again.' It was near a quarter of a year after before it was quite cured. A clergyman, and a ſurgeon well ſkilled in anatomy, upon cloſe inſpection, found not the leaſt appearance of any remaining part of her tongue, nor was there any uvula; they obſerved, indeed, a fleſhy excreſcence, extending itſelf along the left-ſide of the lower jaw, of about a finger's breadth, which, ſhe ſaid, did not begin to grow till ſome years after the cure. The paſſage down the throat, where the uvula ſhould be, had a circular hole, opening a little to the right, large enough to admit a ſmall nutmeg; the excreſcence was quite immoveable, as the ſurgeon felt with his fingers, and he was aſſured ſhe ſpoke as well before it began to grow as ſince. Upon aſking her, in what part of her mouth her moſt ſenſible taſte lay: ſhe ſaid, it was all over alike; and, ſmiling, added, ſhe was too nice in that particular, for if her butter was not curious, ſhe had rather eat dry bread. Though ſhe was able thus to ſpeak from the firſt loſs of her tongue, yet ſhe could not ſwallow ſolid food for many months after, without it's being minced very fine, and then thruſting it into her throat by her finger; but by degrees ſhe got over that difficulty, and her deglutition was now as eaſy as in other people; owing, in a great meaſure, no doubt, to the fleſhy excreſcence. She ſpoke and pronounced very articulately, even ſuch letters, words, and ſyllables, as ſeem to depend moſtly upon the tongue; and ſhe read very plainly, only it was obſerved, that ſometimes ſhe pronounced words ending in *ath* as *et*; *end* as *emb*; *ad* as *eib:* but it required a nice and ſtrict attention to obſerve even this difference of ſound. She ſung very prettily; and, as before remarked, had her taſte very accurate.

CASE LXXVIII.

Of extraordinary Symptoms after a Lying-in.

A Young lady, having caught cold in her lying-in, was attacked with a ſlight neumonic fever and cough; which, in the country, being too lightly conſidered, and no bleeding at firſt ordered, ſhe ſoon fell into a hectic emaciated ſtate; for which ſhe drank aſſes milk, and took the ordinary balſamic remedies, without any benefit for about three weeks; till one morning, being ſeized with a fit of coughing more violent than common, ſhe was greatly alarmed at bringing up two or three pieces of a calcarious matter, of different ſizes, from a pin's head to a ſmall pea. Terrified at ſuch appearances, ſhe was conveyed to London by eaſy journies for farther aſſiſtance. The day after her arrival, a phyſician was ſent for, who found her with a quick hectic pulſe, night-ſweats, and a difficulty and ſhortneſs of breathing on motion up ſtairs. Thus ſhe remained three or four days, when another fit of eaſy coughing brought up, one morning, three pieces more of the like calcarious matter; which, nearly examined, reſembled the conſiſtence of a pumice-ſtone, and one of them almoſt equalled in magnitude the kernel of a ſmall hazel-nut: and, as the ſtrength of her pulſe ſeemed capable of bearing it, ſhe was adviſed to loſe five or ſix ounces of blood, to adhere ſtrictly to a vegetable aceſcent diet, and milk every way that her ſtomach would bear it; and ſhe was allowed to eat ſome white of a chicken once every day. Her medicine conſiſted in a cold infuſion of Peruvian bark in river water, with ſome grains of ſpermaceti, and a few drops of the vinous tincture of ipecacuanha, with intent to promote a glandular diſcharge from the lungs, whilſt this preparation of the bark was expected to amend the whole of her conſtitution; but the ipecacuanha, even in the ſmalleſt doſes, diſagreed with her ſtomach,

mach, and ſoon after ſhe grew weary of her bark. This made it requiſite to deviſe ſome medicine not ungrateful to her palate; therefore, enjoining the ſtricteſt regularity as to her bed-time and hours of refreſhment, and aſſes-milk twice a day, ſhe was adviſed to take thirty or forty drops of dulcified elixir of vitriol in every glaſs of Seltzer water, which was to become her conſtant drink, without wine, or any thing elſe added. By this method, in about three weeks time, ſhe began to recover her ſtrength and ſpirits, and loſe her night-ſweats, cough, and every other bad ſymptom that had attended her; and ſhe returned home ſeemingly quite recovered: but there, having quite diſcontinued drinking Seltzer water, her hectic heats recurred in her feet and hands, and alſo her troubleſome feveriſh inquietudes in bed; and other bad ſymptoms, which formerly had worn her down. Riding on horſeback was then recommended to her, and the conſtant uſe of Seltzer water, daily; which, in two months, perfectly reſtored her health, and ſhe continued quite well, and never after coughed up any calcarious ſubſtance.

CASE LXXIX.

Of an Empyema.

IN January, a woman in mean circumſtances but remarkable for ſtrength and vigour, fell upon a ſtone, that ſtruck her immediately under the right ſhoulder-blade; and complained, for about four months after the accident, of pains, not only upon the part ſtruck, but internally through the whole breaſt; notwithſtanding which, ſhe went ſtill about her ordinary affairs. About the middle of the fifth month after the fall, her pains increaſed to that degree, that ſhe was reduced to lie a-bed, and a very ſmall white tumour appeared where ſhe firſt received the ſtroke, which very gradually increaſed till the beginning of September, when a ſurgeon was firſt ſent for, and found her in the following deplorable ſtate, viz. with a violent internal pain through the whole breaſt; a great difficulty of reſpiration; a conſtant diarrhoea, attended with a teneſmus, or perpetual inclination to go to ſtool; frequent waſting ſweats; great drought, and her pulſe hectic; and ſhe was about four months advanced in pregnancy. The tumour was increaſed to the bigneſs of a child's head; was very hard, and of the ſame colour with the reſt of her ſkin; and it obliged her to ſit, night and day, in a bending poſture. In this emergency the ſurgeon was ſolicited in the moſt ardent manner, by the friends and relations, and by the patient herſelf, to relieve her of exquiſite torture, though at the riſk of her life; and he was at length prevailed upon to perform the operation.

After having prepared ſome doſſils and pledgets of dry lint, compreſſes, napkins, and ſcapular, he plunged a large diſſecting knife into the center of the tumour ſome inches deep before he reached the matter, which flowed from the wound, though very large, with the force of a new-tapped caſk, till a veſſel, holding two quarts, was full in about two minutes. But the velocity of egreſs ſtill continuing, he did not venture to allow any greater diſcharge for that time; and he therefore dreſſed the wound with the apparatus before mentioned; gave her ſome ſpoonfuls of a cordial and anodyne mixture; ordered a decoction of the woods, with raiſins, and a little of the Peruvian bark acidulated with a little lemon-juice, for ordinary drink; and panadas, gruels, or ſuch like, with a little white-wine, for food.

On the next day, the pains were not altogether intolerable, and the patient had ſlept more that night than for many preceding. Her ſtools were found to be very much mixed with matter of the ſame colour and conſiſtence, which was white and well-digeſted, as that which came from the wound; and the ſediment of her urine was of the ſame nature. When the dreſſings were removed, the matter iſſued out with the ſame force, and to the ſame quantity as the firſt day, the tumour continuing, notwithſtanding, in exactly the ſame ſituation as before, which was dreſſed as formerly, with only the addition of an emollient and diſcutient cataplaſm.

At the third viſit, her pulſe was neither ſo frequent nor depreſſed as before; her reſpiration was leſs difficult, and all the other ſymptoms leſs threatening; ſhe had ſlept tolerably through the night, though ſtill in a ſitting poſture, being unable to ſuffer any other poſition. The dreſſings being removed, the matter ſpontaneouſly flowed to the ſame quantity of two quarts, or four pounds, but not with the ſame force as the two preceding days. It was ſtill well-digeſted; and at this dreſſing the tumour appeared to be abated conſiderably in magnitude; ſo that, by introducing a finger, the ſurgeon felt a pretty large opening betwixt the ſeventh and eighth true ribs. She was this day dreſſed, and every thing continued as the day preceding.

At the fourth viſit, every ſymptom appeared more favourable; and upon removing the dreſſings, the tumour was found to be much decreaſed, but the quantity of matter was, notwithſtanding, as much at this as any of the foregoing dreſſings; only towards the latter end of it's emiſſion, it drilled down her back, and appeared to be much exhauſted. It was now dreſſed with the common digeſtive, mixed with a little balſam of Peru; and the compreſſes wetted in brandy. This night was the firſt of her lying down; and ſhe was directed to let the diſeaſed ſide be downward, to promote the diſcharge of the matter.

On the fifth day ſhe was chearful; ſhe had ſlept well through the night; her pulſe was free, with very little frequency; and every other ſymptom agreed with it, except the diarrhœa, which ſtill continued, though not ſo much attended with the teneſmus, nor were her ſtools and urine ſo full of matter as before. The dreſſing and bed-cloaths were now found all ſoaked with matter; but when removed, there was a very ſmall ſpontaneous diſcharge from the orifice, which was dreſſed as uſual.

On the ſixth day, the patient was very feeble, diſpirited, and in a moſt languiſhing condition, from an abortion which happened that morning. She had a coldneſs and rigidity in her limbs, and frequent faintings, attended with ſome ſlight rigors; notwithſtanding which, the clearing diſcharges continued to flow, though in a ſmall quantity. She now frequently took a little warm ſack-whey, with ſome drops of tincture of caſtor, tincture of ſaffron, and aromatic ſaline ſpirit, mixed together, by which ſhe recovered her ſtrength and ſpirits daily, every thing elſe correſponding; ſo that in ten days after, ſhe was able to quit the bed, and ſit ſome hours upon a chair. From this time, till the cure was compleated, ſhe was dreſſed once in two days, for about eight weeks, when a firm cicatrice was procured, after a ſmall exfoliation from one or both of the ribs. She has continued ever ſince free of all complaints, except an ague, and has borne three children.

CASE LXXX.

Of a pregnant Woman, whoſe broken Leg did not unite till after her Delivery.

A Woman, aged 22 years, was admitted into the Liverpool Infirmary, with the larger bone of the leg fractured obliquely in that part where, four times in five caſes, it always breaks, for reaſons which, on examining the bone, are obvious. She was of a delicate, lax habit, and now ſuppoſed herſelf to be in the ſecond month of her pregnancy. In conſequence of proper treatment, all tenſion and tumefaction diſappeared, and the limb was quite cool and eaſy. At the termination of a fortnight from the time of the accident, on particular examination, the fracture appeared more looſe than it ought to be; and at the end of the third week, was exactly in the ſame ſtate. It did not appear probable that the want of union could be owing to conſtitution, as ſhe had, only three months before impregnation, been very happily and ſpeedily cured of a fractured thigh-bone by another ſurgeon; and this appeared the more improbable, as ſhe was a ſober, temperate woman: and was it not more reaſonable to ſuppoſe that the want of union depended upon the pregnant ſtate, than that it was cauſed by the interpoſition of any of the ſoft circumjacent parts? She was now informed that the event of the caſe was precarious; that it was dubious whether a cure could be obtained until ſhe was delivered; and patience, with ſubmiſſion, were recommended. It was thought right to ſtrengthen her conſtitution, and take all poſſible care of her general health. Hence, the Peruvian bark was given, and it's doſe increaſed from time to time, until ſhe took an ounce each day; and this was regularly perſevered in for the ſpace of ſix weeks; at the expiration of which, all remained juſt in the ſame ſtate as before. She was now ſeized with a feveriſh indiſpoſition, which continued eight days; but ſhe did not appear to be injured by it, unleſs being rather reduced in ſtrength. She now requeſted to be removed from the hoſpital; after which, all neceſſary attendance was given her, and the ſurgeon was deſired to attend her at the time of delivery. She went on very well in regard to her pregnancy, and there was no alteration in the limb, excepting that it was conſiderably ſwelled. At the expiration of the ninth month of her pregnancy, and the ſeventh from the accident, ſhe was delivered; and as ſhe recovered ſtrength, the ſwelling went off, and the bone began to unite: in ſhort, in about nine weeks from her delivery, ſhe was able to walk about the room, and ſoon had a very firm and uſeful limb.

CASE LXXXI.

Of the large Bone of the Leg extracted and regenerated.

IN November, Andrew Johnſon, a boy, 10 or 11 years of age, complained of violent pain in both his legs. Two days after his firſt complaint, he was viſited by a ſurgeon, and had then no inflammation or ſwelling on them. He was ordered to drink the decoction of ſarſaparilla, and to rub his legs with warm cloths, which he could not ſuffer, it increaſed the pain ſo much.

Three days after he was viſited again, when his pulſe was quick; he had great thirſt, and a large livid tumour appeared from the knee of each leg to near the ancles. An inciſion was made into one of them, and three ounces of a bloody humour were diſcharged: then, ſearching with a probe, the ſurgeon found the bone carious, and therefore enlarged the inciſion, and felt the bone with his finger. He applied warm tincture of myrrh to the ſore; and the next day there was a large diſcharge of bloody humour, with ſeveral livid ſpots, from which the ſame ſort of matter oozed. The whole length was now fomented with a decoction of aromatic herbs in wine. Tincture of myrrh was applied to the bone, and the lips of the wound were dreſſed with warm digeſting balſam. The other leg was now opened, which had much the ſame appearance, and was treated in the ſame way; the patient was ordered to take ſome powder of Peruvian bark, in wine, and to drink the decoction of ſarſaparilla, with lime-water, twice a day.

The ninth day after the firſt inciſion, ſeveral ſplinters of bones threw off; and in the January following, the whole ſhin-bone of the one leg came out: the leg was put into a box, and being carefully dreſſed, was cicatrized before the middle of March.

The large bone of the other leg ſeparated in ſmall pieces, and was ſlower in the cure, not being cicatrized till the beginning of May.

In June, the boy was able to walk without crutches. In Auguſt, he fell from a horſe, and broke his thigh-bone, which was cured ſoon; and the lad continued well ever after, being fit for any country work, with his legs ſtraight, and only a little thickneſs at the ancles.

Before the bones caſt out, the matter coming from the ſores was ſo corroſive, that it bliſtered whatever part of the ſurgeon's hands were wetted with it in dreſſing him.

CASE LXXXII.

Of an Apoplexy, occaſioned by a Fall from a Horſe.

ON the 19th of July, a robuſt boy, of 13 years of age, when at a full gallop, fell from his horſe; and thoſe who were in company with him were ſo barbarous as to ride on their journey, without aſſiſting him. The place where he fell being three or four miles from his father's houſe, it was three hours before his friends found him lying apoplectic in the place where he fell. As ſoon as they got him home, they had him blooded, and put him to bed. Nothing more was done for him until the 22d, at ſeven in the evening, when a phyſician was called, and found him a-bed, in ſo profound a ſleep, that it was impoſſible even to make him look up, though his hair was pulled, and his ſkin pinched in ſeveral places, and he had remained ſo ever ſince his fall. His pulſe was ſomewhat low, and not frequent, and he breathed tolerably well; he had not vomited at all, there was no inflammation in his eyes, and no external wound or bruiſe could be diſcovered.

He was immediately ordered to be taken out of bed and put in a chair; and his friends were directed to keep him ſitting up as much as they could, that the veſſels of the inferior part of the body, being more preſſed by their contained fluids, and conſequently more diſtended, a revulſion might be made from the head; and that the veſſels there, being more emptied, the extravaſated blood might the more readily be abſorbed by the veins. He was immediately blooded until his pulſe ſunk much; his legs were put in warm water, and the nape of his neck cupped and ſcarified. When all this was done, his head was ſomewhat relieved, ſo that he ſometimes looked up, and anſwered once or twice when he was called aloud, and his hair pulled. His head was now ordered to be ſhaved, that a more certain judgment might be formed the next day, if there was any external wound or bruiſe. New-made whey was directed for his ordinary drink; and, for food, water-gruel, made of oat-meal; or wheat bread, which he took with appetite enough.

The next morning he ſeemed ſomewhat eaſier than he was at firſt, but ſtill very lethargic, with his pulſe and breathing as the day before. After a very ſtrict enquiry, no external bruiſe or wound on his head could be diſcovered. He was again blooded to the quantity of about eight ounces, which ſunk his pulſe for ſome time; and the directions formerly given were ordered to be ſtrictly obſerved, as to bathing, diet, and keeping him out of bed.

On the 24th, he ſeemed much eaſier than he was on the 23d; ſo that he frequently anſwered when he was ſpoke to, but he was ſtill lethargic. He was now blooded at the jugular vein, till his pulſe ſunk conſiderably, and a purgative was preſcribed to be taken the next morning, being the 25th, which was to be repeated on the 27th.

Directions were alſo given to ſupply him plentifully with luke-warm whey to drink, during the operation of the purge. It was obſerved that the letting blood at the jugular vein made almoſt immediately a ſenſible change on him for the better; and after he had taken the two purgatives, which operated very well, he was no more lethargic: but his judgment continued impaired, and he had loſt his memory ſo much, that he could not read one word, although before he had the fall he could have read very diſtinctly.

Two or three days after the laſt doſe of the purgative, it was ordered to be repeated, and a ſeton to be put in his neck. The purgative operated very well, but his judgment and memory continued as much impaired as formerly, and he would not allow the ſeton to be put in, nor would his parents permit it to be done by force; upon which his phyſician left him, declaring he could preſcribe no more for him, unleſs a ſeton was tried.

No farther application was made to the phyſician for a fortnight or three weeks; in which time he recovered his ſtrength, and was able to walk and ride: but he was ſtill very ſtupid, and his memory as bad as ever; ſo that, if he happened to walk to the diſtance of an hundred paces from his father's houſe, he could hardly find the way back again without a guide. And in this ſituation he was found by the phyſician about three weeks after the laſt purgative was adminiſtered; and then he was prevailed upon to admit of the ſeton. It was accordingly put on, and in three weeks he recovered his memory and judgment, and continued afterwards as well as before the fall. The ſeton was ordered to be kept in five or ſix weeks after his recovery, and when it was taken out, a purgative was twice repeated.

CASE LXXXIII.

Of an Hydrocephalus Internus, or Dropſy of the Head.

A Healthy boy, aged 6 years, received, in November laſt, on the top of his head, a ſmart blow from a ſtone, thrown at him by one of his companions: of this he complained a good deal at the time; but as the wound was but ſlight, it was almoſt forgotten. In about a fortnight from this accident, he made frequent complaints of a pain in his head. As his breath was at this time unuſually offenſive, and his belly ſomewhat enlarged, this diſorder was ſuppoſed to be owing to worms. In a few days, the pain of the head increaſed; he had a conſiderable degree of fever, was exceedingly reſtleſs, and loſt his ſpeech.

The ſecond day from the loſs of his ſpeech, he was firſt viſited by a phyſician. The by-ſtanders informed him, that the fever, within a few days, had much increaſed: his pulſe was quick, and his fleſh hot; his cheeks fluſhed conſiderably, and he ſweated much about the head, face, and neck. He was in a lethargic ſtupor, ſcarce ſenſible of any thing that was ſaid to him, and parted with his urine and ſtools involuntarily: the pupils of both eyes were in the greateſt degree of dilitation, and they did not contract, when a lighted candle, or any other object, was brought haſtily near them; an indication of the loſs of ſight. The right-arm was, in a conſiderable degree, enfeebled; but with the left-arm and hand he was, when rouzed, conſtantly rubbing his forehead, as he rolled his head on the pillow from ſide to ſide. Though his ſleeps were ſhort, whenever he awoke, he ſhrieked for a conſiderable time. Beſides frequent returns of general convulſions, the muſcles of his face, eyes, and eye-lids, were particularly convulſed; and ſo, at times, was his right enfeebled arm.

From conſidering the hiſtory of this diſeaſe, and comparing it with ſeveral others, his phyſician had little doubt of it's having it's ſource from water in the cavities of the brain, and judged that there were but ſmall hopes of relief: he, however, ordered a bliſter to his head, ſome medicines to abate the fever, and to keep his bowels gently ſoluble, with proper liquids and nouriſhment.

For four or five days from this time, every ſymptom increaſed to ſuch a degree, that death was hourly expected. The patient was, indeed, reduced to the greateſt degree of debility: in the courſe of a few days more, however, the ſymptoms were milder; he every ſecond day took an opening medicine; and as his feveriſh heat abated, he was allowed weak broth, and aliment, more nutritious than that before directed, with a ſmall proportion of wine.

In about a fortnight from the phyſician being called in, his pupils contracted at times, and he gave indications of his being able at ſuch times to diſtinguiſh objects. The convulſions, fluſhings, great reſtleſsneſs, cryings out upon waking, and other ſymptoms, continued, though in a leſs degree, for near a month longer; by which time his ſight was quite reſtored, and his right-arm had recovered it's ſtrength: in about a fortnight more his ſpeech returned, after having loſt it two months; by ſlow degrees he recovered his ſtrength, and continued perfectly well.

CASE LXXXIV.

Of a Dropſy, cured by a ſpontaneous Diſcharge.

A Woman, betwixt 40 and 50 years of age, had laboured under a dropſy of the belly for ſome years, and in that time had taken a great many medicines by the direction of a phyſician. The moſt powerful diuretics and purgatives were given in vain; the bulk of her belly, which was very great, rather increaſing; ſo that, at length, deſpairing of doing her ſervice by medicines, and ſhe refuſing to undergo a tapping, her phyſicians gave over preſcribing for her.

Having one day taken a pretty briſk purgative, ſhe told one of her medical attendants that the waters oozed out at her navel. This oozing continued conſtantly after, but was ſlow and gentle, giving her no other uneaſineſs than what was occaſioned by wetting her linens. She remained in this ſtate from the firſt appearance of this diſcharge in the fall of the year, all the winter, without her belly increaſing, but her fleſh and ſtrength waſted.

In the following May, having gone a ſhort journey in a coach, in returning home, the orifices at the navel were ſo dilated, that the water guſhed out in a ſtream, as if ſhe had been tapped, and with great difficulty ſhe was carried from the coach to her houſe, where the water continued to flow plentifully while a phyſician was ſent for; the people about her computing that ſhe had diſcharged between twenty and thirty quarts of water. When the phyſician came, ſhe was ſo faint, her pulſe ſo ſunk, and her looks ſo ghaſtly, that he found it abſolutely neceſſary to put a ſtop to any farther diſcharge of water at that time, by proper compreſſes and bandages; and he then ordered her to be laid in bed, with her head low and her feet raiſed. She paſſed the night indifferently, but recovered her pulſe and ſpirits. The next morning, a conſiderable quantity more of water ran out when the wet dreſſings were changed for clean ones; and that day ſhe was ſeized with a fever, attended with violent and threatening ſymptoms, ſuch as vomiting, hiccough, and aſthma. The fever continued in this way ſome days, but at length ſhe recovered entirely, and continued that ſummer, and moſt part of the autumn, in a perfect ſtate of health; her belly not being in the leaſt ſwelled, and her fleſh, ſtrength, colour, and appetite, being recovered.

In October ſhe was ſeized, all of a ſudden, with a colic, attended with violent vomiting, and an obſtinate coſtiveneſs, which cut her off in a few days.

PRICES OF DRUGS,

AT

APOTHECARY's HALL, LONDON.

	l.	s.	d.
ACID Elixir of Vitriol, per oz.	0	0	6
Ægyptiacum, per lb.	0	4	4
Æthiops Mineral, per oz.	0	0	6
Allum, per lb.	0	0	6
Aloes, (called Barbadoes Aloes) per lb.	0	3	0
Alkaline Aloetic Wine, per oz.	0	0	6
Antimonial Wine, per oz.	0	0	6
Armenian Bole, per lb.	0	2	6
Aromatic Species, per oz.	0	2	0
Aromatic Tincture, per oz.	0	0	6
Aſafœtida, per oz.	0	0	6
Balſam of Tolu, per oz.	0	1	0
Balſam of Guaiacum, per oz.	0	0	9
Balſam of Capiva, per oz.	0	0	5
Bark or Root of Mezereon, per oz.	0	1	4
Borax, per lb.	0	6	4
Calomel, per oz.	0	1	6
Canadian Balſam, per oz.	0	0	9
Calcined Quickſilver, per dram	0	3	0
Caſcarilla, or Elutheria, per lb.	0	2	0
Chryſtals of Tartar, per lb.	0	1	2
Clutton's Febrifuge, per oz.	0	1	0
Contrayerva Powder, per oz.	0	1	0
Colgotha of Vitriol, per oz.	0	0	6
Columba Root, per oz.	0	1	2
Crab's Claws prepared, per lb.	0	2	0
Cream of Tartar, per lb.	0	1	6
Diaſcordium, per oz.	0	0	6
Diachylon Plaiſter, per lb.	0	1	8
Elixir Proprietatis, per oz.	0	1	3
Emetic Tartar, per oz.	0	1	0
Engliſh Saffron, per oz.	0	3	4
Epſom Salts, per lb.	0	0	6
Extract of Lead, per oz.	0	0	9
Extract of Savine, per oz.	0	0	8
Factitious Cinnabar, per oz.	0	1	4
Flowers of Benzoin, per oz.	0	0	8
Frankincenſe, per lb.	0	0	10
Gamboge, per oz.	0	0	10
Galbanum, per oz.	0	0	5
Galls, per lb.	0	1	8
Glauber's Salts, per oz.	0	0	6
Golden Sulphur of Antimony, per oz.	0	2	0
Gum Labdanum, per oz.	0	0	6
Jalap, per oz.	0	0	6
Ipecacuanha Powder, per oz.	0	1	6

	l.	s.	d.
Lapis Calamineris prepared, per lb.	0	2	0
Liquid Laudanum, per oz.	0	1	0
Locatelli's Balſam, per lb.	0	2	4
Magneſia, per oz.	0	0	8
Manna, per oz.	0	0	6
Martial Flowers, per oz.	0	1	4
Mindinerus's Spirit, per oz.	0	3	0
Native Cinnabar, per oz.	0	1	6
Nitre, per lb.	0	2	0
Oil of Sweet Almonds, per lb.	0	4	0
Oil of Rhodium, per dram,	0	10	0
Opium, per oz.	0	2	0
Opodeldoc, per oz.	0	0	6
Peruvian Bark, per oz.	0	1	0
Prepared Calamy, per oz.	0	1	6
Quickſilver, per lb.	0	5	0
Raleigh's Confection, per oz.	0	5	0
Red Corroſive Mercury, per oz.	0	1	6
Rhubarb, per oz.	0	2	6
Rochelle Salts, per oz.	0	0	6
Ruſſian Caſtor powdered, per dram	0	2	6
Salt of Hartſhorn, per oz.	0	1	4
Salt Prunella, per lb.	0	3	0
Salt of Steel, per oz.	0	0	6
Salt of Wormwood, per oz.	0	1	0
Spirits of Sea Salt, per oz.	0	0	3
Spirit of Sal Volatile, per oz.	0	0	6
Sugar of Lead, per oz.	0	0	9
Theriaca Andromachi, per lb.	0	6	8
Tincture of Japan Earth, per oz.	0	0	8
Tincture of Myrrh, per oz.	0	0	6
Tincture of Rhubarb, per oz.	0	0	8
Tinctura Sacra, per oz.	0	0	6
Tincture of Soot, per oz.	0	0	6
Tincture of Steel, per oz.	0	0	6
Venice Treacle, per lb.	0	6	8
Volatile Aromatic Spirit, per oz.	0	0	6
Volatile Tincture of Valerian, per oz.	0	1	0
White Vitriol, per lb.	0	1	2
White corroſive Mercury per oz.	0	1	0

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